

ORDER FOR SUPPLIES OR SERVICES (FINAL)										PAGE 1 OF 1																								
1. CONTRACT NO. N65236-14-D-4925			2. DELIVERY ORDER NO. N6523618F3028			3. EFFECTIVE DATE 2017 Dec 22			4. PURCH REQUEST NO. N65236-18-NR-55048		5. PRIORITY Unrated																							
6. ISSUED BY SPAWAR-Systems Center Lant (CHRL) P.O. BOX 190022 North Charleston SC 29419-9022 VERNON L PRYOR/N65236 843-218-3081 Ext. 3081			7. ADMINISTERED BY DCMA PHILADELPHIA 700 ROBBINS AVENUE, BLDG. 4-A, P.O. BOX 11427 PHILADELPHIA PA 19111-0427			8. DELIVERY FOB DESTINATION OTHER (See Schedule if other)			9. CONTRACTOR CENTURUM INFORMATION TECHNOLOGY INC 12000 LINCOLN DRIVE WESTSUITE 107 MARLTON NJ 08053-3340																									
10. DELIVER TO FOB POINT BY (Date) See Schedule			11. X IF BUSINESS IS SMALL SMALL DISADVANTAGED WOMEN-OWNED			12. DISCOUNT TERMS Net 30 Days WIDE AREA WORK FLOW			13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Section G																									
14. SHIP TO See Section D			15. PAYMENT WILL BE MADE BY DFAS Columbus Center, North Entitlement Operations P.O. Box 182266 Columbus OH 43218-2266			16. MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 10%;">16. TYPE OF ORDER</td> <td style="width: 10%;">DELIVERY/ CALL</td> <td style="width: 5%; text-align: center;">X</td> <td colspan="9">This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of numbered contract.</td> </tr> <tr> <td>PURCHASE</td> <td></td> <td colspan="9">Reference your _____ furnish the following on terms specified herein. ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.</td> </tr> </table>												16. TYPE OF ORDER	DELIVERY/ CALL	X	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of numbered contract.									PURCHASE		Reference your _____ furnish the following on terms specified herein. ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.								
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<div style="display: flex; justify-content: space-between;"> <div> <p>CENTURUM INFORMATION TECHNOLOGY INC</p> <p>NAME OF CONTRACTOR</p> </div> <div> <p>(b)(4), (b)(6)</p> <p>Contracts Manager</p> <p>SIGNATURE</p> </div> <div> <p>TYPED NAME AND TITLE</p> </div> <div> <p>DATE SIGNED (YYYYMMDD)</p> </div> </div> <p>If this box is marked, supplier must sign Acceptance and return the following number of copies:</p>																																		
17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE See Schedule																																		
18. ITEM NO.		19. SCHEDULE OF SUPPLIES/SERVICES				20. QUANTITY ORDERED/ ACCEPTED *		21. UNIT		22. UNIT PRICE		23. AMOUNT																						
		See Schedule																																
<p>*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.</p>						24. UNITED STATES OF AMERICA				25. TOTAL		\$9,869,606.39																						
						BY: /s/VERNON L PRYOR				26. DIFFERENCES																								
						12/22/2017																												
						CONTRACTING/ORDERING OFFICER																												
27a. QUANTITY IN COLUMN 20 HAS BEEN																																		
INSPECTED		RECEIVED		ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED:																														
b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE						c. DATE		d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE																										
e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE						28. SHIP NO.		29. D.O. VOUCHER NO.		30. INITIALS																								
						PARTIAL		32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR																								
f. TELEPHONE		g. E-MAIL ADDRESS				FINAL				34. CHECK NUMBER																								
36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.						31. PAYMENT				35. BILL OF LADING NO.																								
a. DATE		b. SIGNATURE AND TITLE OF CERTIFYING OFFICER				COMPLETE																												
						PARTIAL																												
						FULL																												
37. RECEIVED AT		38. RECEIVED BY (Print)		39. DATE RECEIVED		40. TOTAL CON-TAINERS		41. S/R ACCOUNT NUMBER		42. S/R VOUCHER NO.																								

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SECTION B SUPPLIES OR SERVICES AND PRICES

CLIN - SUPPLIES OR SERVICES

For Cost Type Items:

Item	PSC	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
4001	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #1 (RDT&E)	1.0	LO			
4101	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #2. (O&MN,N)	1.0	LO			
4102	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #3. (OPN)	1.0	LO			
4103	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #4. (Fund Type - TBD)	1.0	LO			
410301	J058	ACRN:AC COST CODE:A30004305958 NWA/BS#:BS-001719.0301010101 (OPN)					
4104	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #5. (RDT&E)	1.0	LO			
4105	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #6. (Fund Type - TBD)	1.0	LO			
4106	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #7. (Fund Type - TBD)	1.0	LO			
410601	J058	ACRN:AA COST CODE:A00004305958 DOC#:N001918WX02850 NWA/BS#:100001339631-0010 (O&MN,N)					
410602	J058	ACRN:AB COST CODE:A10004305958 DOC#:N001918WX02850 NWA/BS#:100001339627-0010 (O&MN,N)					

(b)(4)

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Item	PSC	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
4107	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #8. (Fund Type - TBD)	1.0	LO			
4108	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #9. (Fund Type - TBD)	1.0	LO			
4109	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #10. (Fund Type - TBD)	1.0	LO			
4110	J058	Transport and Computing Infrastructure Services to be performed in accordance with the PWS-CPFF Funding Source #11. (Fund Type - TBD)	1.0	LO			
5001	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #1 THIS CLIN IS TIED TO CLIN 4001 FROM THE BASIC CONTRACT. (RDT&E) Option	1.0	LO			
5101	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #2 THIS CLIN IS TIED TO CLIN 4101 FROM THE BASIC CONTRACT. (O&MN,N) Option	1.0	LO			
5102	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #3 THIS CLIN IS TIED TO CLIN 4102 FROM THE BASIC CONTRACT. (OPN) Option	1.0	LO			
5103	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #4 THIS CLIN IS TIED TO CLIN 4103 FROM THE BASIC CONTRACT. (Fund Type - TBD) Option	1.0	LO			

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Item	PSC	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
5104	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #5 THIS CLIN IS TIED TO CLIN 4102 FROM THE BASIC CONTRACT. (RDT&E) Option	1.0	LO			
5105	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #6 THIS CLIN IS TIED TO CLIN 4105 FROM THE BASIC CONTRACT. (Fund Type - TBD) Option	1.0	LO			
5106	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #7 THIS CLIN IS TIED TO CLIN 4106 FROM THE BASIC CONTRACT. (Fund Type - TBD) Option	1.0	LO			
5107	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #8 THIS CLIN IS TIED TO CLIN 4107 FROM THE BASIC CONTRACT. (Fund Type - TBD) Option	1.0	LO			
5108	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #9 THIS CLIN IS TIED TO CLIN 4108 FROM THE BASIC CONTRACT. (Fund Type - TBD) Option	1.0	LO			
5109	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #10 THIS CLIN IS TIED TO CLIN 4109 FROM THE BASIC CONTRACT. (Fund Type - TBD) Option	1.0	LO			

(b)(4)

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Item	PSC	Supplies/Services	Qty	Unit	Est. Cost	Fixed Fee	CPFF
5110	J058	OPTION YEAR 1 Transport and Computing Infrastructure Services to be performed in accordance with the PWS. Funding Source #11 THIS CLIN IS TIED TO CLIN 4110 FROM THE BASIC CONTRACT. (Fund Type - TBD) Option	1.0	LO		(b)(4)	

THIS IS A COST PLUS FIXED FEE, LEVEL OF EFFORT TYPE ORDER.

The number of hours estimated for this LOE tasking is (b)(4) (b)(4) base year, and (b)(4) OY1). In performing the requirements of this order, the contractor may use any combination of hours from the labor categories approved at the basic contract level, so long as the estimated total cost and the funded amount to date for the order is not exceeded and the total number of hours provided does not exceed the estimated number of hours by more than 5%.

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SECTION C DESCRIPTIONS AND SPECIFICATIONS

SECTION C – DESCRIPTION/SPECS/WORK STATEMENT

SPECIFICATIONS/STATEMENT OF WORK/PERFORMANCE WORK STATEMENT

Work under this performance-based task order will be performed in accordance with the following description/ specifications/ statement of work (SOW) which herein will be referred to as Performance Work Statement (PWS):

SHORT TITLE: TACMOBILE IPT COMMAND AND CONTROL (C2) SYSTEMS AND SOFTWARE ENGINEERING & FOREIGN MILITARY SALES (FMS) SUPPORT

1.0 PURPOSE

The Space and Naval Warfare Systems Center Atlantic's (SPAWARSYSCEN Atlantic) TacMobile Integrated Product Team (IPT) provides PMW750 with the execution of the TacMobile Program including Program of Record, Marine Patrol and Reconnaissance Force (MPRF), Family of Systems, and Joint tasking including the efforts required for development, production, and fielding of future system capabilities for previously fielded systems.

1.1 SCOPE

This PWS covers engineering, communications design, installation and training for ground support centers that provide command and control, mission direction and coordination for MPRA P-8 support and Foreign Military Sales (FMS) Customers. The ground support systems are based on the USN TacMobile Program of Record (PoR) systems. They are designed to provide around-the-clock or mission direction and overall coordination of concurrent, multi-platform (airborne and surface), multi-mission operations in support of the FMS tasking. They provide the Operational Commander with all system functions necessary to meet their operational requirement.

1.1.1 Multiple Funding

This task order is funded with multiple appropriations as delineated on specified contract line item numbers (CLINs). The applicable PWS task(s) associated with each funding CLIN is outlined in Section B and Section G.

1.2 BACKGROUND

TacMobile provides multi-level security information systems and associated C2 of related ISR platforms to enable maritime commanders to plan, direct and control tactical operations of joint and naval expeditionary forces. The TacMobile system of systems provides the expeditionary C2 and ISR interface capability associated with Joint ISR missions and includes IT infrastructure, IS capabilities for multiple security enclaves, video and telephony in fixed and mobile configurations.

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The Contractor is responsible for supporting the Space and Naval Warfare Systems Center Atlantic TacMobile IPT with development, training, management, building and fielding of future capabilities for the TacMobile Command

Center baseline and ISR platform software and hardware interfaces. This includes Systems and Software Engineering as defined by ISO/IEC 15288 and ISO/IEC 12207, Project Management including Financial Management, and organizational process and value stream mapping and improvements in support of the systems and software lifecycle. This will include expertise for improvements to the baseline's infrastructure, C2 capabilities, and Joint ISR support in the areas of systems design, information system security, training, IPT support system operations, IT design and prototyping and technology insertion and will include the required planning and management support.

The contractor is also responsible for engineering, testing, installation, training, configuration management (CM), and technical support for Foreign Military Sales (FMS).

2.0 PLACE(S) OF PERFORMANCE

The site requirements below identify contractor employee office location(s) and the location of Government provided facilities, if applicable. Travel locations (i.e., temporary duty sites) are not specified in this section. If applicable, travel locations are specified under task order PWS Para 11.0.

Space and Naval Warfare Systems Center Atlantic, Charleston facility
Space and Naval Warfare Systems Center Atlantic, Patuxent River, MD facility
Contractor facilities, North Charleston, SC
TacMobile Site, Jacksonville, FL

2.1 GOVERNMENT FACILITIES

Government facilities (i.e., office space or lab space) are provided to those labor categories that would otherwise adversely affect the work performance if they were not available on Government site. Contractor personnel with supplied Government facilities shall be located at Space and Naval Warfare Systems Center Atlantic in Charleston, SC, Space and Naval Warfare Systems Center Atlantic, Patuxent River, MD and Jacksonville, FL.

2.2 CONTRACTOR FACILITIES

A significant portion of work issued under this task order requires close liaison with the Government. The contractor shall be prepared to establish a local facility within a thirty (30)-mile radius of Space and Naval Warfare System Center Atlantic, Charleston, SC and Patuxent River, MD. Close proximity allows for proper task order administration duties. The contractor's facility is not necessary for the exclusive use of this task order and can be utilized on a shared basis. For task orders with Government Property, the contractor's facility shall include physical security to protect Government assets as identified in Para10.0. The contractor shall meet all facility location and size requirements within 30 days after task order award. Facility space shall include offices, conference rooms, lab work, and a staging area for materials and equipment.

3.0 PERFORMANCE REQUIREMENTS

CLIN 4001/5001: PMW 750 RDTE SUPPORT

3.1 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on project management policy and procedures. (CDRL T008)

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3.1.1 The Project Manager shall serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.1.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL T002, T003, T006)

3.1.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors.

3.1.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products in the development phase.

3.1.5 The contractor shall develop Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4001/5001: PMW 750 RDTE SUPPORT

3.2 SYSTEMS ENGINEERING

3.2.1 Future Planning Support

The contractor shall support the IPT through the process of developing various requirements and architecture products required of an ACAT III POR.

3.2.1.1 The contractor shall provide support to the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering, documentation development with defined acquisition templates, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.2.1.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT.

3.2.1.3 The contractor shall support the government by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

3.2.1.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and system modifications in the TacMobile Requirements Management process.

3.2.1.5 The contractor shall provide support for DoDAF v2.02, with the JCIDS (Joint Capabilities Integration & Development System) process, and IBM Rational System Architect in generating products for supporting the TacMobile acquisition milestones.

3.2.1.6 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.2.2 Software Engineering

The contractor shall support the software engineering activities required to develop the changes to the TacMobile C2 and ISR capabilities in support of Marine Patrol and Reconnaissance Force (MPRF), Family of Systems (FoS) and Joint mission sets.

3.2.2.1 The contractor shall perform software research, design, development, unit test, requirements validation and

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engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.2.2.2 The contractor shall support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms.

3.2.2.3 The contractor shall provide support in system administration of a RHEL environment. The contractor shall conduct diagnostic troubleshooting and maintenance of the servers, workstations and network devices.

3.2.2.4 The contractor shall provide software development using Java and C++ on a RHEL OS environment, Security-Enhanced Linux (SELinux), VMWare, SQL Server and Bash scripting, TCP/IP socket programming, Active Directory/LDAP and encryption libraries.

3.2.2.5 The contractor shall provide software integration with Windows and RHEL OS environments. Ability to produce IA secure STIG compliant OS environments. Ability to conduct diagnostic troubleshooting and maintenance of the software images for servers and workstations to ensure compatibility with hardware variants. The contractor shall have expertise in patch development for release of IAVA updates or vendor specific patches.

3.2.2.6 The contractor shall provide expertise to support the development of software documentation to such as Interface Control Document (ICD), Interface Design Document (IDD), Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Government approved format. (CDRL T013)

3.2.2.7 The contractor shall provide sub-system verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.2.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

3.2.3.1 The contractor shall support the integration of future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.2.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.2.3.3 The contractor shall support documentation development related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users. Types of documentation expected to be supported include SOVT, PITCO, user manuals (operator and administration), installation guides, assembly drawings, Installation Requirement Drawings (IRDs) and Installation Design Plans (IDPs). Documents shall be in accordance with Government approved format.

3.2.4 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.2.4.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security

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engineering.

3.2.4.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.2.4.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.2.4.4 The contractor shall manage IAVs during the development phase in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.2.4.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.2.4.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.2.4.7 The contractor shall provide expertise to support the software engineering activities required to enable the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.2.4.8 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.2.4.9 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms

3.2.4.10 The contractor shall provide expertise in software integration with Windows, RHEL and VMWare environments. The contractor shall have the ability to produce secure STIG compliant OS environments both physical and virtual environment. The contractor shall have the ability to conduct diagnostic troubleshooting and maintenance of the software images for servers and workstations to ensure compatibility with hardware variants. The contractor shall provide in patch development for release of IAVA updates or vendor specific patches.

3.2.4.11 The contractor shall provide expertise to support the development of software documentation to such as Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Govt approved format. (CDRL T013)

3.2.4.12 The contractor shall provide sub-system verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.2.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.2.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active

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Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.2.5.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.2.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.2.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.2.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.2.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.2.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.2.6 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to be accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process development team.
- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) Initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.2.6.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.2.6.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

3.2.6.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.2.6.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

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3.2.6.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.2.6.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare Systems Center Atlantic Joint Framework.

CLIN 4101/5101: PMW 750 OMN SUPPORT

3.3 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on project management policy and procedures. (CDRL T008)

3.3.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.3.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.3.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors and TacMobile IPT.

3.3.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.3.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4101/5101: PMW 750 OMN SUPPORT

3.4 SYSTEMS ENGINEERING

3.4.1 System Documentation and Training

3.4.1.1 The contractor shall provide expertise to update existing documentation such as technical manuals, engineering drawings, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. The contractor shall revise training courses and prepare appropriate training catalogs, revise instructor materials (course outline, background material, and training aids), student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms), and computer based/computer aided training. The contractor shall train personnel by conducting formal classroom courses, workshops and seminars. (CDRL T017)

3.4.2 Site Operations and Site Support

3.4.2.1 The contractor shall provide site support expertise at TacMobile sites. The contractor shall provide technical support and provide training for fielded systems. All site support visits shall be documented with the reason for the visit, corrective actions, and personnel trained.

3.4.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

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The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the updating, fielding, and maintenance of hardware, OS, software baselines, and training for fielded TacMobile sub-systems.

3.4.3.1 The contractor shall support the integration of existing developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.4.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.4.3.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.4.4 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to be accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process development team.
- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) Initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.4.4.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.4.4.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

3.4.4.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.4.4.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

3.4.4.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.4.4.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare Systems Center Atlantic Joint Framework.

3.4.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user

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administration.

3.4.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.4.5.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.4.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.4.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.4.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.4.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.4.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.4.6 Pre-Installation Engineering Support

3.4.6.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T002, T003)

3.4.6.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.4.6.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.4.6.4 The Contractor shall provide technical support during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.4.6.5 The Contractor shall provide technical support for testing.

3.4.6.6 The Contractor shall provide system administrator support.

3.4.6.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

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3.4.6.8 The Contractor shall develop test report. (CDRL T005)

3.4.6.9. The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)

3.4.6.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.

3.4.6.11. The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.

3.4.6.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.

3.4.6.13. The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRLT007)

3.4.6.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)

3.4.6.15. The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)

3.4.6.16. The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.

3.4.6.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.

3.4.6.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)

3.4.6.19 The Contractor shall develop Engineering Drawings. (CDRL T016)

3.4.6.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)

3.4.7 Installation Engineering Support

3.4.7.1 The Contractor shall support Technical Meetings. (CDRL T003)

3.4.7.2 The Contractor shall perform system operation verification at site prior to installation.

3.4.7.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)

3.4.7.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)

3.4.7.5 The Contractor shall provide technical system support during installation of the MTOC, FAK and SAT.

3.4.7.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.4.7.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

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3.4.8 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.4.8.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.4.8.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.4.8.3 Access the ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.4.8.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

3.4.8.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.4.8.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.4.8.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.4.8.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.4.8.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package to Project Lead after installations.

CLIN 4102/5102: PMW 750 OPN SUPPORT

3.5 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on project management policy and procedures. (CDRL T008)

3.5.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.5.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.5.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors and TacMobile IPT.

3.5.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.5.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

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CLIN 4102/5102: PMW 750 OPN SUPPORT

3.6 SYSTEMS ENGINEERING

3.6.1 System Documentation and Training

3.6.1.1 The contractor shall provide expertise to update existing documentation such as technical manuals, engineering drawings, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. The contractor shall revise training courses and prepare appropriate training catalogs, revise instructor materials (course outline, background material, and training aids), student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms), and computer based/computer aided training. The contractor shall train personnel by conducting formal classroom courses, workshops and seminars. (CDRL T017)

3.6.2 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

3.6.2.1 The contractor shall support the integration of existing and future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.6.2.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines. Ability to perform physical and functional configuration audits for system verification.

3.6.2.3 The contractor shall provide expertise with CMPro administration, software configuration and license management.

3.6.2.4 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.6.3 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.6.3.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.6.3.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.6.3.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.6.3.4 The contractor shall manage IAVs in accordance with the TacMobile IAVM Plan including support to the

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FAM and FCB processes for notification of required changes at enclaves.

3.6.3.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.6.3.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.6.4 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.6.4.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.6.4.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist Government personnel with schema modifications, database mappings, dashboards; database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.6.4.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.6.4.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.6.4.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.6.4.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.6.4.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.6.5 Procurement Support

3.6.5.1 The contractor shall maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements.

3.6.5.2 The contractor shall coordinate technical configuration requirements and hardware vendor inputs with the BOM.

3.6.5.3 The contractor shall coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers.

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3.6.5.4 The contractor shall communicate Government technical configuration requirements to hardware vendors.

3.6.5.5 The contractor shall communicate hardware vendor inputs to Materials Procurement Lead.

3.6.5.6 The contractor shall perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications.

3.6.6 Pre-Installation Engineering Support

3.6.6.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T002, T003)

3.6.6.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.6.6.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.6.6.4 The Contractor shall provide technical support during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.6.6.5 The Contractor shall provide technical support for testing.

3.6.6.6 The Contractor shall provide system administrator support.

3.6.6.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

3.6.6.8 The Contractor shall develop test report. (CDRL T005)

3.6.6.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)

3.6.6.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.

3.6.6.11 The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.

3.6.6.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.

3.6.6.13 The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRLT007)

3.6.6.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)

3.6.6.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)

3.6.6.16 The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.

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3.6.6.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.

3.6.6.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)

3.6.6.19 The Contractor shall develop Engineering Drawings. (CDRL T016)

3.6.6.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)

3.6.7 Installation Engineering Support

3.6.7.1 The Contractor shall support Technical Meetings. (CDRL T003)

3.6.7.2 The Contractor shall perform system operation verification at site prior to installation.

3.6.7.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)

3.6.7.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)

3.6.7.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.

3.6.7.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.6.7.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

3.6.8 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.6.8.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.6.8.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.6.8.3 The contractor shall Access ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.6.8.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

3.6.8.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.6.8.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.6.8.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.6.8.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

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3.6.8.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package Project Lead after installations.

CLIN 4103/5103: PMA 290 APN SUPPORT

3.7 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on project management policy and procedures. (CDRL T008)

3.7.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.7.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.7.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors and TacMobile IPT.

3.7.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.7.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4103/5103: PMA 290 APN SUPPORT

3.8 SYSTEMS ENGINEERING

3.8.1 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to enable the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.8.1.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.8.1.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms

3.8.1.3 The contractor shall provide expertise in system administration of a RHEL environment. Ability to conduct diagnostic troubleshooting and maintenance of the servers, workstations and network devices

3.8.2 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

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3.8.2.1 The contractor shall support the integration of existing and future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.8.2.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.8.2.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.8.3 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.8.3.1 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.8.3.2 The contractor shall manage IAVs in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.8.3.3 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.8.3.4 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.8.4 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.8.4.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.8.4.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.8.4.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.8.4.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for

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thick client access for up to 10 users.

3.8.4.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.8.4.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.8.4.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.8.5 Pre-Installation Engineering Support

3.8.5.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T002, T003)

3.8.5.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.8.5.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.8.5.4 The Contractor shall provide technical support Project Lead during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.8.5.5 The Contractor shall provide technical support for testing.

3.8.5.6 The Contractor shall provide system administrator support.

3.8.5.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

3.8.5.8 The Contractor shall develop test report. (CDRL T005)

3.8.5.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)

3.8.5.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.

3.8.5.11 The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.

3.8.5.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.

3.8.5.13. The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRLT007)

3.8.5.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)

3.8.5.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)

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3.8.5.16. The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.

3.8.5.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.

3.8.5.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)

3.8.5.19 The Contractor shall develop Engineering Drawings. (CDRL T016)

3.8.5.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)

3.8.6 Installation Engineering Support

3.8.6.1 The Contractor shall support Technical Meetings. (CDRL T003)

3.8.6.2 The Contractor shall perform system operation verification at site prior to installation.

3.8.6.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)

3.8.6.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)

3.8.6.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.

3.8.6.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.8.6.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

3.8.7 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.8.7.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.8.7.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.8.7.3 The contractor shall Access ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.8.7.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

3.8.7.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.8.7.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

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3.8.7.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.8.7.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.8.7.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package Project Lead after installations.

CLIN 4104/5104: PMA 290 RDTE SUPPORT

3.9 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on project management policy and procedures. (CDRL T008)

3.9.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.9.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.9.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors and TacMobile IPT.

3.9.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.9.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4104/5104: PMA 290 RDTE

3.10 SYSTEMS ENGINEERING

3.10.1 Future Planning Support

The contractor shall provide expertise to support to the IPT through the process of updating various requirements and architecture products required of an ACAT III POR.

3.10.1.1 The contractor shall provide expertise to support the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.10.1.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT.

3.10.1.3 The contractor shall assist government Test Leads by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

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3.10.1.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and sub-system modifications in the TacMobile Requirements Management process.

3.10.1.5 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.10.2 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to enable the changes to the TacMobile C2 and ISR capabilities in support of MPRE, FOS and Joint mission sets.

3.10.2.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.10.2.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms.

3.10.2.3 The contractor shall provide expertise in system administration of a RHEL environment. Ability to conduct diagnostic troubleshooting and maintenance of the servers, workstations and network devices

3.10.2.4 The contractor shall provide senior expertise with software development using Java and C++ on a RHEL OS environment. Experience with Security-Enhanced Linux (SELinux), VMWare, SQL Server and Bash scripting. Extensive knowledge in TCP/IP socket programming, Active Directory/LDAP and encryption libraries. The contractor shall have understanding of Information Assurance compliance, integration and testing.

3.10.2.5 The contractor shall provide expertise to support the development of software documentation to such as Interface Control Document (ICD), Interface Design Document (IDD), Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Govt approved format. (CDRL T013)

3.10.2.6 The contractor shall provide expertise to provide development level sub-system verification testing support at TacMobile related Systems Integration Labs for ISR platforms.

3.10.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

3.10.3.1 The contractor shall support the integration of existing and future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.10.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.10.3.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.10.4 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for

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changes to TacMobile C2 and ISR support capabilities.

3.10.4.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.10.4.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.10.4.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.10.4.4 The contractor shall manage IAVs in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.10.4.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.10.4.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.10.4.7 The contractor shall provide expertise to support the software engineering activities required to enable the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.10.4.8 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.10.4.9 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms

3.10.4.10 The contractor shall provide expertise in software integration with Windows, RHEL and VMWare environments. The contractor shall have the ability to produce secure STIG compliant OS environments both physical and virtual environment. The contractor shall have the ability to conduct diagnostic troubleshooting and maintenance of the software images for servers and workstations to ensure compatibility with hardware variants. The contractor shall have expertise in patch development for release of IAVA updates or vendor specific patches.

3.10.4.11 The contractor shall provide expertise to support the development of software documentation to such as Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with government approved format. (CDRL T013)

3.10.4.12 The contractor shall provide sub-system verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.10.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.10.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite

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integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC), Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.10.5.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.10.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.10.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.10.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.10.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.10.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.10.6 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to be accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process development team.
- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) Initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.10.6.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.10.6.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

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3.10.6.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.10.6.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

3.10.6.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.10.6.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare Systems Center Atlantic Joint Framework.

CLIN 4105/5105: AUSTRALIA SUPPORT

3.11 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on project management policy and procedures. (CDRL T008)

3.11.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.11.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.11.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors and TacMobile IPT.

3.11.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.11.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4105/5105: AUSTRALIA SUPPORT

3.12 SYSTEMS ENGINEERING

3.12.1 System Training

3.12.1.1 The contractor shall provide expertise to support the development and updates to existing documentation such as manuals, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. Develop and revise training courses and prepare appropriate training catalogs. Develop instructor materials (course outline, background material, and training aids). The contractor shall develop all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Develops computer based/computer aided training. Train personnel by conducting formal classroom courses, workshops and seminars.

3.12.2 Future Planning Support

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The contractor shall provide expertise to support to the IPT through the process of updating and developing various requirements and architecture products required of an ACAT III POR.

3.12.2.1 The contractor shall provide expertise to support the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.12.2.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT.

3.12.2.3 The contractor shall assist government Test Leads by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

3.12.2.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and sub-system modifications in the TacMobile Requirements Management process.

3.12.2.5 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.12.3 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to enable the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.12.3.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.12.3.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms

3.12.3.3 The contractor shall provide expertise to support the development of software documentation to such as Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Govt approved format. (CDRL T013)

3.12.3.4 The contractor shall provide expertise to provide development level sub-system test verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.12.4 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

3.12.4.1 The contractor shall support the integration of existing and future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.12.4.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.12.4.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

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3.12.5 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.12.5.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.12.5.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.12.5.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.12.5.4 The contractor shall manage IAVs in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.12.5.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.12.5.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.12.6 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.12.6.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.12.6.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.12.6.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.12.6.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200

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users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.12.6.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.12.6.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.12.6.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.12.7 Procurement Support

3.12.7.1 The contractor shall maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements.

3.12.7.2 The contractor shall coordinate technical configuration requirements and hardware vendor inputs with the BOM.

3.12.7.3 The contractor shall coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers.

3.12.7.4 The contractor shall communicate Government technical configuration requirements to hardware vendors.

3.12.7.5 The contractor shall communicate hardware vendor inputs to Materials Procurement Lead.

3.12.7.6 The contractor shall perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications.

3.12.8 Pre-Installation Engineering Support

3.12.8.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T002, T003)

3.12.8.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.12.8.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.12.8.4 The Contractor shall provide technical support Project Lead during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.12.8.5 The Contractor shall provide technical support for testing.

3.12.8.6 The Contractor shall provide system administrator support.

3.12.8.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

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- 3.12.8.8 The Contractor shall develop test report. (CDRL T005)
- 3.12.8.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)
- 3.12.8.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.
- 3.12.8.11. The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.
- 3.12.8.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.
- 3.12.8.13. The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRLT007)
- 3.12.8.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)
- 3.12.8.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)
- 3.12.8.16 The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.
- 3.12.8.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.
- 3.12.8.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)
- 3.12.8.19 The Contractor shall develop Engineering Drawings. (CDRL T016)
- 3.12.8.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)
- 3.12.9 Installation Engineering Support
- 3.12.9.1 The Contractor shall support Technical Meetings. (CDRL T003)
- 3.12.9.2 The Contractor shall perform system operation verification at site prior to installation.
- 3.12.9.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)
- 3.12.9.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)
- 3.12.9.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.
- 3.12.9.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)
- 3.12.9.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

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3.12.10 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.12.10.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.12.10.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.12.10.3 The contractor shall Access ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.12.10.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

3.12.10.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.12.10.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.12.10.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.12.10.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.12.10.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package Project Lead after installations.

CLIN 4106/5106: UNITED KINGDOM -ROYAL AIR FORCE (RAF) SUPPORT

3.13 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on FMS case and project management policy and procedures. (CDRL T008)

3.13.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.13.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.13.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors and TacMobile IPT.

3.13.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.13.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated

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carryover expenditures and respond to financial data calls.

3.13.6 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products in the development phase.

CLIN 4106: UNITED KINGDOM -ROYAL AIR FORCE (RAF) SUPPORT

3.14 SYSTEMS ENGINEERING

3.14.1 System Documentation and Training

3.14.1.1 The contractor shall provide expertise to update existing documentation such as technical manuals, engineering drawings, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. The contractor shall revise training courses and prepare appropriate training catalogs, revise instructor materials (course outline, background material, and training aids), student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms), and computer based/computer aided training. The contractor shall train personnel by conducting formal classroom courses, workshops and seminars. (CDRL T017)

3.14.2 Site Operations and Site Support

3.14.2.1 The contractor shall provide site support expertise at TacMobile sites. The contractor shall provide technical support and provide training for fielded systems. All site support visits shall be documented with the reason for the visit, corrective actions, and personnel trained.

3.14.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

3.14.3.1 The contractor shall support the integration of existing and future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.14.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.14.3.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.14.4 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to be accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process development team.
- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery

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and reduce process related risk.

- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) Initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.14.4.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.14.4.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

3.14.4.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.14.4.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

3.14.4.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.14.4.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare System Center Atlantic Joint Framework.

3.14.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.14.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.14.5.2 The contractor shall administer and maintain the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.14.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.14.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.14.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

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3.14.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.14.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.14.6 Future Planning Support

The contractor shall provide expertise to support to the IPT through the process of updating and developing various requirements and architecture products required of an ACAT III POR.

3.14.6.1 The contractor shall provide expertise to support the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.14.6.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT.

3.14.6.3 The contractor shall assist government Test Leads by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

3.14.6.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and sub-system modifications in the TacMobile Requirements Management process.

3.14.6.5 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.14.7 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to enable the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.14.7.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.14.7.1.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms

3.14.7.1.3 The contractor shall provide expertise to support the development of software documentation to such as Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Govt approved format. (CDRL T013)

3.14.7.1.4 The contractor shall provide expertise to provide development level sub-system test verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.14.8 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

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3.14.8.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.14.8.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.14.8.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.14.8.4 The contractor shall manage IAVs in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.14.8.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.14.8.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.14.9 Procurement Support

3.14.9.1 The contractor shall maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements.

3.14.9.2 The contractor shall coordinate technical configuration requirements and hardware vendor inputs with the BOM.

3.14.9.3 Coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers.

3.14.9.4 The contractor shall communicate Government technical configuration requirements to hardware vendors.

3.14.9.5 The contractor shall communicate hardware vendor inputs to Materials Procurement Lead.

3.14.9.6 The contractor shall perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications.

3.14.10 Pre-Installation Engineering Support

3.14.10.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T002, T003)

3.14.10.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.14.10.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

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3.14.10.4 The Contractor shall provide technical support Project Lead during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.14.10.5 The Contractor shall provide technical support for testing.

3.14.10.6 The Contractor shall provide system administrator support.

3.14.10.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

3.14.10.8 The Contractor shall develop test report. (CDRL T005)

3.14.10.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)

3.14.10.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.

3.14.10.11 The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.

3.14.10.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.

3.14.10.13 The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRLT007)

3.14.10.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)

3.14.10.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)

3.14.10.16 The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.

3.14.10.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.

3.14.10.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)

3.14.10.19 The Contractor shall develop Engineering Drawings. (CDRL T016)

3.14.10.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)

3.14.11 Installation Engineering Support

3.14.11.1 The Contractor shall support Technical Meetings. (CDRL T003)

3.14.11.2 The Contractor shall perform system operation verification at site prior to installation.

3.14.11.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)

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3.14.11.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)

3.14.11.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.

3.14.11.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.14.11.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

3.14.12 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.14.12.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.14.12.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.14.12.3 The contractor shall Access ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.14.12.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

3.14.12.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.14.12.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.14.12.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.14.12.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.14.12.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package Project Lead after installations.

CLIN 4107-/5107 NEW ZEALAND -ROYAL NEW ZEALAND AIR FORCE (RNZAF) SUPPORT

3.15 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on FMS case and project management policy and procedures. (CDRL T008)

3.15.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.15.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure

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management. (CDRL A003, T002, T003, T006)

3.15.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors and TacMobile IPT.

3.15.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.15.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

3.15.6 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products in the development phase.

3.15.7 For prototypes, the contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4107/5107- NEW ZEALAND -ROYAL NEW ZEALAND AIR FORCE (RNZAF) SUPPORT

3.16 SYSTEMS ENGINEERING

3.16.1 System Documentation and Training

3.16.1.1 The contractor shall provide expertise to update existing documentation such as technical manuals, engineering drawings, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. The contractor shall revise training courses and prepare appropriate training catalogs, revise instructor materials (course outline, background material, and training aids), student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms), and computer based/computer aided training. The contractor shall train personnel by conducting formal classroom courses, workshops and seminars. (CDRL T017)

3.16.2 Site Operations and Site Support

3.16.2.1 The contractor shall provide site support expertise at TacMobile sites. The contractor shall provide technical support and provide training for fielded systems. All site support visits shall be documented with the reason for the visit, corrective actions, and personnel trained.

3.16.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the updating, fielding, and maintenance of hardware, OS, software baselines, and training for fielded TacMobile sub-systems.

3.16.3.1 The contractor shall support the integration of existing developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.16.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.16.3.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

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3.16.4 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to be accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process development team.
- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) Initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.16.4.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.16.4.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

3.16.4.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.16.4.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

3.16.4.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.16.4.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare System Center Atlantic Joint Framework.

3.16.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.16.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.16.5.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema

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modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.16.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.16.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.16.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.16.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.16.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.16.6 Future Planning Support

The contractor shall provide expertise to support to the IPT through the process of developing various requirements and architecture products required of an ACAT III POR.

3.16.6.1 The contractor shall provide expertise to support the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering, documentation development with defined acquisition templates, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.16.6.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT within the AIR Sub-Portfolio.

3.16.6.3 The contractor shall assist government Test Leads by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

3.16.6.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and sub-system modifications in the TacMobile Requirements Management process.

.5 The contractor shall provide support for DoDAF v2.02, with the JCIDS (Joint Capabilities Integration & Development System) process, and IBM Rational System Architect in generating products for supporting the TacMobile acquisition milestones. 3.16.6.6 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.16.7 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to develop the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.16.7.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.16.7.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms.

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3.16.7.3 The contractor shall provide expertise in system administration of a RHEL environment. The contractor shall have the ability to conduct diagnostic troubleshooting and maintenance of the servers, workstations and network devices.

3.16.7.4 The contractor shall provide senior expertise with software development using Java and C++ on a RHEL OS environment. Experience with Security-Enhanced Linux (SELinux), VMWare, SQL Server and Bash scripting. Extensive knowledge in TCP/IP socket programming, Active Directory/LDAP and encryption libraries. The contractor shall have understanding of Information Assurance compliance, integration and testing.

3.16.7.5 The contractor shall provide expertise in software integration with Windows and RHEL OS environments. Ability to produce IA secure STIG compliant OS environments. Ability to conduct diagnostic troubleshooting and maintenance of the software images for servers and workstations to ensure compatibility with hardware variants. The contractor shall have expertise in patch development for release of IAVA updates or vendor specific patches.

3.16.7.6 The contractor shall provide expertise to support the development of software documentation to such as Interface Control Document (ICD), Interface Design Document (IDD), Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Government approved format. (CDRL T013)

3.16.7.7 The contractor shall provide sub-system verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.16.8 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

3.16.8.1 The contractor shall support the integration of future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.16.8.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.16.8.3 The contractor shall support documentation development related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users. Types of documentation expected to be supported include SOVT, PITCO, user manuals (operator and administration), installation guides, assembly drawings, Installation Requirement Drawings (IRDs) and Installation Design Plans (IDPs). Documents shall be in accordance with Government approved format.

3.16.9 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.16.9.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.16.9.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual

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reviews, inspections, and interviews.

3.16.9.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.16.9.4 The contractor shall manage IAVs during the development phase in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.16.9.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.16.9.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.16.10 Procurement Support

3.16.10.1 The contractor shall maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements.

3.16.10.2 The contractor shall coordinate technical configuration requirements and hardware vendor inputs with the BOM.

3.16.10.3 The contractor shall coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers.

3.16.10.4 The contractor shall communicate Government technical configuration requirements to hardware vendors.

3.16.10.5 The contractor shall communicate hardware vendor inputs to Materials Procurement Lead.

3.16.10.6 The contractor shall perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications.

3.16.11 Pre-Installation Engineering Support

3.16.11.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T003)

3.16.11.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.16.11.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.16.11.4. The Contractor shall provide technical support Project Lead during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.16.11.5. The Contractor shall provide technical support for testing.

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- 3.16.11.6 The Contractor shall provide system administrator support.
- 3.16.11.7 The Contractor shall provide support in the development and execution of software test plan and procedures.
- 3.16.11.8 The Contractor shall develop test report. (CDRL T005)
- 3.16.11.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)
- 3.16.11.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.
- 3.16.11.11 The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.
- 3.16.11.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.
- 3.16.11.13 The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRLT007)
- 3.16.11.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)
- 3.16.11.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)
- 3.16.11.16 The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.
- 3.16.11.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.
- 3.16.11.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)
- 3.16.11.19 The Contractor shall develop Engineering Drawings. (CDRL T016)
- 3.16.11.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)
- 3.16.12 Installation Engineering Support
- 3.16.12.1 The Contractor shall support Technical Meetings. (CDRL T003)
- 3.16.12.2 The Contractor shall perform system operation verification at site prior to installation.
- 3.16.12.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)
- 3.16.12.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)
- 3.16.12.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.

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3.16.12.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.16.12.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

3.16.13 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.16.13.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.16.13.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.16.13.3 The contractor shall Access ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.16.13.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

3.16.13.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.16.13.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.16.13.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.16.13.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.16.13.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package Project Lead after installations.

CLIN 4108/5108- ROYAL NORWEGIAN AIR FORCE (RNøAF) SUPPORT (NORWAY)

3.17 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on FMS case and project management policy and procedures. (CDRL T008)

3.17.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.17.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.17.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors.

3.17.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of

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financial resources related to TacMobile end item products.

3.17.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

3.17.6 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products in the development phase.

3.17.7 For prototypes, the contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4108/5108- ROYAL NORWEGIAN AIR FORCE (RNoAF) SUPPORT (NORWAY)

3.18 SYSTEMS ENGINEERING

3.18.1 System Documentation and Training

3.18.1.1 The contractor shall provide expertise to update existing documentation such as technical manuals, engineering drawings, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. The contractor shall revise training courses and prepare appropriate training catalogs, revise instructor materials (course outline, background material, and training aids), student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms), and computer based/computer aided training. The contractor shall train personnel by conducting formal classroom courses, workshops and seminars. (CDRL T017)

3.18.2 Site Operations and Site Support

3.18.2.1 The contractor shall provide site support expertise at TacMobile sites. The contractor shall provide technical support and provide training for fielded systems. All site support visits shall be documented with the reason for the visit, corrective actions, and personnel trained.

3.18.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the updating, fielding, and maintenance of hardware, OS, software baselines, and training for fielded TacMobile sub-systems.

3.18.3.1 The contractor shall support the integration of existing developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.18.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.18.3.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.18.4 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to be accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process

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development team.

- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.18.4.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.18.4.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

3.18.4.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.18.4.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

3.18.4.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.18.4.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare System Center Atlantic Joint Framework.

3.18.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.18.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.18.5.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.18.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

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3.18.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.18.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.18.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.18.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.18.6 Future Planning Support

The contractor shall provide expertise to support to the IPT through the process of developing various requirements and architecture products required of an ACAT III POR.

3.18.6.1 The contractor shall provide expertise to support the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering, documentation development with defined acquisition templates, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.18.6.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT within the AIR Sub-Portfolio.

3.18.6.3 The contractor shall assist government Test Leads by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

3.18.6.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and sub-system modifications in the TacMobile Requirements Management process.

.5 The contractor shall provide support for DoDAF v2.02, with the JCIDS (Joint Capabilities Integration & Development System) process, and IBM Rational System Architect in generating products for supporting the TacMobile acquisition milestones. 3.18.6.6 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.18.7 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to develop the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.18.7.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.18.7.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms.

3.18.7.3 The contractor shall provide expertise in system administration of a RHEL environment. The contractor shall have the ability to conduct diagnostic troubleshooting and maintenance of the servers, workstations and network devices.

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3.18.7.4 The contractor shall provide senior expertise with software development using Java and C++ on a RHEL OS environment. Experience with Security-Enhanced Linux (SELinux), VMWare, SQL Server and Bash scripting. Extensive knowledge in TCP/IP socket programming, Active Directory/LDAP and encryption libraries. The contractor shall have understanding of Information Assurance compliance, integration and testing.

3.18.7.5 The contractor shall provide expertise in software integration with Windows and RHEL OS environments. Ability to produce IA secure STIG compliant OS environments. Ability to conduct diagnostic troubleshooting and maintenance of the software images for servers and workstations to ensure compatibility with hardware variants. The contractor shall have expertise in patch development for release of IAVA updates or vendor specific patches.

3.18.7.6 The contractor shall provide expertise to support the development of software documentation to such as Interface Control Document (ICD), Interface Design Document (IDD), Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Government approved format. (CDRL T013)

3.18.7.7 The contractor shall provide sub-system verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.18.8 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.18.8.1 The contractor shall provide security/IA requirements for new capabilities identifying controls in place for systems and networks. The contractor will recommend, and adopt processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.18.8.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.18.8.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.18.8.4 The contractor shall manage IAVs during the development phase in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.18.8.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.18.8.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.18.9 Procurement Support

3.18.9.1 The contractor shall maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements.

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3.18.9.2 The contractor shall coordinate technical configuration requirements and hardware vendor inputs with the BOM.

3.18.9.3 The contractor shall coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers.

3.18.9.4 The contractor shall communicate Government technical configuration requirements to hardware vendors.

3.18.9.5 The contractor shall communicate hardware vendor inputs to Materials Procurement Lead.

3.18.9.6 The contractor shall perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications.

3.18.10 Pre-Installation Engineering Support

3.18.10.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T002, T003)

3.18.10.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.18.10.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.18.10.4 The Contractor shall provide technical support Project Lead during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.18.10.5 The Contractor shall provide technical support for testing.

3.18.10.6 The Contractor shall provide system administrator support.

3.18.10.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

3.18.10.8 The Contractor shall develop test report. (CDRL T005)

3.18.10.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)

3.18.10.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.

3.18.10.11 The Contractor shall provide support in the development of Software Version Description (SVD) and software documentation.

3.18.10.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.

3.18.10.13 The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRL T007)

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3.18.10.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)

3.18.10.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)

3.18.10.16 The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.

3.18.10.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.

3.18.10.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)

3.18.10.19 The Contractor shall develop Engineering Drawings. (CDRL T016)

3.18.10.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)

3.18.11 Installation Engineering Support

3.18.11.1 The Contractor shall support Technical Meetings. (CDRL T003)

3.18.11.2 The Contractor shall perform system operation verification at site prior to installation.

3.18.11.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT.

3.18.11.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)

3.18.11.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.

3.18.11.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.18.11.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

3.18.12 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.18.12.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.18.12.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.18.12.3 The contractor shall Access ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.18.12.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

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3.18.12.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.18.12.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.18.12.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.18.12.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.18.12.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package Project Lead after installations.

CLIN 4109/5109- REPUBLIC of SOUTH KOREAN NAVY (ROKN) SUPPORT

3.19 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on FMS case and project management policy and procedures. (CDRL T008)

3.19.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.19.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.19.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors.

3.19.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.19.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

3.19.6 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products in the development phase.

3.19.7 For prototypes, the contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4109/5109- REPUBLIC of SOUTH KOREAN NAVY (ROKN) SUPPORT

3.20 SYSTEMS ENGINEERING

3.20.1 System Documentation and Training

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3.20.1.1 The contractor shall provide expertise to update existing documentation such as technical manuals, engineering drawings, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. The contractor shall revise training courses and prepare appropriate training catalogs, revise instructor materials (course outline, background material, and training aids), student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms), and computer based/computer aided training. The contractor shall train personnel by conducting formal classroom courses, workshops and seminars. (CDRL T017)

3.20.2 Site Operations and Site Support

3.20.2.1 The contractor shall provide site support expertise at TacMobile sites. The contractor shall provide technical support and provide training for fielded systems. All site support visits shall be documented with the reason for the visit, corrective actions, and personnel trained.

3.20.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the updating, fielding, and maintenance of hardware, OS, software baselines, and training for fielded TacMobile sub-systems:

3.20.3.1 The contractor shall support the integration of existing developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.20.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.20.3.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.20.4 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to being accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process development team.
- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) Initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.20.4.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.20.4.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

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3.20.4.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.20.4.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

3.20.4.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.20.4.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare System Center Atlantic Joint Framework.

3.20.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.20.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.20.5.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.20.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.20.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.20.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.20.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.20.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.

3.20.6 Future Planning Support

The contractor shall provide expertise to support to the IPT through the process of developing various requirements and architecture products required of an ACAT III POR.

3.20.6.1 The contractor shall provide expertise to support the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering,

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documentation development with defined acquisition templates, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.20.6.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT within the AIR Sub-Portfolio.

3.20.6.3 The contractor shall assist government Test Leads by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

3.20.6.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and sub-system modifications in the TacMobile Requirements Management process.

3.20.6.5 The contractor shall provide support for DoDAF v2.02, with the JCIDS (Joint Capabilities Integration & Development System) process, and IBM Rational System Architect in generating products for supporting the TacMobile acquisition milestones. 3.20.6.6 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.20.7 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to develop the changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.20.7.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.20.7.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms.

3.20.7.3 The contractor shall provide expertise in system administration of a RHEL environment. The contractor shall have the ability to conduct diagnostic troubleshooting and maintenance of the servers, workstations and network devices.

3.20.7.4 The contractor shall provide senior expertise with software development using Java and C++ on a RHEL OS environment. Experience with Security-Enhanced Linux (SELinux), VMWare, SQL Server and Bash scripting. Extensive knowledge in TCP/IP socket programming, Active Directory/LDAP and encryption libraries. The contractor shall have understanding of Information Assurance compliance, integration and testing.

3.20.7.5 The contractor shall provide expertise in software integration with Windows and RHEL OS environments. Ability to produce IA secure STIG compliant OS environments. Ability to conduct diagnostic troubleshooting and maintenance of the software images for servers and workstations to ensure compatibility with hardware variants. The contractor shall have expertise in patch development for release of IAVA updates or vendor specific patches.

3.20.7.6 The contractor shall provide expertise to support the development of software documentation to such as Interface Control Document (ICD), Interface Design Document (IDD), Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Government approved format. (CDRL T013)

3.20.7.7 The contractor shall provide sub-system verification support at TacMobile related Systems Integration Labs for ISR platforms.

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3.20.8 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.20.8.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.20.8.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.20.8.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.20.8.4 The contractor shall manage IAVs during the development phase in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.20.8.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.20.8.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.20.9 Procurement Support

3.20.9.1 The contractor shall maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements.

3.20.9.2 The contractor shall coordinate technical configuration requirements and hardware vendor inputs with the BOM.

3.20.9.3 The contractor shall coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers.

3.20.9.4 The contractor shall communicate Government technical configuration requirements to hardware vendors.

3.20.9.5 The contractor shall communicate hardware vendor inputs to Materials Procurement Lead.

3.20.9.6 The contractor shall perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications.

3.20.10 Pre-Installation Engineering Support

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3.20.10.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T003)

3.20.10.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL T004)

3.20.10.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.20.10.4. The Contractor shall provide technical support Project Lead during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements. (CDRL T002)

3.20.10.5 The Contractor shall provide technical support for testing.

3.20.10.6 The Contractor shall provide system administrator support.

3.20.10.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

3.20.10.8 The Contractor shall develop test report. (CDRL T005)

3.20.10.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)

3.20.10.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.

3.20.10.11 The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.

3.20.10.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.

3.20.10.13 The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRLT007)

3.20.10.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRLT007)

3.20.10.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)

3.20.10.16 The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.

3.20.10.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.

3.20.10.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)

3.20.10.19 The Contractor shall develop Engineering Drawings. (CDRL T016)

3.20.10.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)

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3.20.11 Installation Engineering Support

3.20.11.1 The Contractor shall support Technical Meetings. (CDRL T002, T003)

3.20.11.2 The Contractor shall perform system operation verification at site prior to installation.

3.20.11.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)

3.20.11.4 The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)

3.20.11.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.

3.20.11.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.20.11.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

3.20.12 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.20.12.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.20.12.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.20.12.3 The contractor shall Access ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.20.12.4 The contractor shall perform repair or replacement of broken items/software deficiencies.

3.20.12.5 The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.20.12.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.20.12.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.20.12.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.20.12.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package Project Lead after installations.

CLIN 4110/5110- ROYAL SAUDI NAVAL FORCES (RSNF) SUPPORT

3.21 PROGRAM MANAGEMENT SUPPORT

The contractor shall ensure efficient management of the Task Order and implementation of procedures to ensure full responsiveness to contractual requirements and provide program support to the TacMobile program. The Contractor shall provide guidance on FMS case and project management policy and procedures. (CDRL T008)

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3.21.1 The contractor shall assign a Project Manager that will serve as the principle point of contact to interface with the government and shall establish off-site and on-site Program and Financial Management Analysts.

3.21.2 The Contractor shall support weekly and/or monthly program and technical status, which shall include the development of program status and schedules, program briefs, trip reports, meeting minutes, identification and resolution of action items, control and reporting of program expenditures, and releasability/foreign disclosure management. (CDRL A003, T002, T003, T006)

3.21.3 The contractor shall support management and technical reviews of TacMobile activities and respond to programmatic data calls from sponsors.

3.21.4 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products.

3.21.5 The contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

3.21.6 The contractor shall plan and coordinate budget and budget execution and support the optimization of financial resources related to TacMobile end item products in the development phase.

3.21.7 For prototypes, the contractor shall support the development & delivery of labor, contract and Bill of Materials (BOM) procurement spend plans for funding acceptance and track estimated vs. actual spend plans, track anticipated carryover expenditures and respond to financial data calls.

CLIN 4110/5110- ROYAL SAUDI NAVAL FORCES (RSNF) SUPPORT

3.22 SYSTEMS ENGINEERING

3.22.1 System Documentation and Training

3.22.1.1 The contractor shall provide expertise to update existing documentation such as technical manuals, engineering drawings, load, configure and production instructions, Fleet Introductory Training and schoolhouse course materials. The contractor shall revise training courses and prepare appropriate training catalogs, revise instructor materials (course outline, background material, and training aids), all student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms), and computer based/computer aided training. The contractor shall train personnel by conducting formal classroom courses, workshops and seminars. (CDRL T017)

3.22.2 Site Operations and Site Support

3.22.2.1 The contractor shall provide site support expertise at TacMobile sites. The contractor shall provide technical support and provide training for fielded systems. All site support visits shall be documented with the reason for the visit, corrective actions, and personnel trained.

3.22.3 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the updating, fielding, and maintenance of hardware, OS, software baselines, and training for fielded TacMobile sub-systems.

3.22.3.1 The contractor shall support the integration of existing developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

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3.22.3.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.22.3.3 The contractor shall support documentation changes related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users.

3.22.4 Systems Engineering Process Improvements

The contractor shall provide the expertise to support the TacMobile IPT's effort to improve systems engineering and business processes. The goals of this ongoing effort are to do more with fewer resources, increase the speed of delivery for products and services, and to improve the quality of the products and services delivered to end users. This is to be accomplished through the following activities:

- 1) Align the IPT Structure with best practices for a product oriented integrated product and process development team.
- 2) Improve the management of the IPT's human capital through a dedicated and focused skills inventory and training program known as 'TacMobile University.'
- 3) Improve the speed and responsiveness of the development value stream to keep pace with the end users' needs for new capabilities, enhancement, modernization, sustainment engineering and field support.
- 4) Improve the supply chain operations to deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 5) Improve the production operation deliver greater efficiency, decrease cost, increase speed to delivery and reduce process related risk.
- 6) Initiate a value stream change process that will evolve the value stream rapidly and efficiently to meet the future needs of the IPT.

3.22.4.1 The contractor shall provide expertise to review the IPT's 'as-is' process documentation, compare it to actual processes in use through evaluation of actuals and provide the IPT's leadership team with identified best practices and recommendations for process changes including process sunset and improvements.

3.22.4.2 The contractor shall collect and assess 'as-is' performance metrics and shall make recommendations for the creation of new performance measurements.

3.22.4.3 The contractor shall lead the effort of performing root cause analysis on key performance shortfalls and shall create a Corrective Action Plan with a suggested approach for each e.g. Just Fix It, Queue for BPR, Tools, Environment, People, etc.

3.22.4.4 The contractor shall develop an ideal state Concept of Operations for the efforts of the IPT to include development, production, fielding and sustainment phases.

3.22.4.5 The contractor shall perform a gap analysis between 'as-is' and ideal state Concept of Operations.

3.22.4.6 The contractor shall develop a future state for the TacMobile IPT Systems Engineering and Business Operations Value Stream in accordance with the Space and Naval Warfare System Center Atlantic Joint Framework.

3.22.5 Systems Engineering Toolset Support (IBM Rational)

The contractor shall host and administer the existing government directed tool suite (IBM Rational) including server hardware, virtualized server Operating Systems (OS), database maintenance and administration, and user administration.

3.22.5.1 The contractor shall support the TacMobile IBM Rational server hardware and software suite integration of the following Rational software: Rational Quality Manager (RQM), Rational Team Concert (RTC) Rational RequisitePro, Rational DOORS Next Generation (NextGen), Rational System Architect (SA), Rational SA DODAF Plug-in, Rational ClearQuest, and Rational Publishing Engine (RPE); Rational software dependencies

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include Microsoft (MS) Windows Server 2012, MS SQL Server 2012, VMware ESXi, VMware vCenter appliance, VMware VDP, Microsoft IIS, Active Directory, Crystal Reports, IBM Websphere, Apache, MS Office, Remote Desktop Services, and Adobe Reader.

3.22.5.2 The contractor is responsible for administering and maintaining the hardware and software suite including maintaining a user portal for password management, security updates, software updates or upgrades, custom script creation, custom report creation, run compiles, assist government personnel with schema modifications, database mappings, dashboards, database backups, system backups, virtualization management, load balancing servers to ensure high availability, wellness monitoring, maintain IA posture, follow industry best practices.

3.22.5.3 The contractor shall complete data and user migration to the IBM Jazz Team Server (JTS) suite.

3.22.5.4 The contractor shall provide Web services for all web-enabled Rational products for up to 200 users; and provide continuity of the existing secure VPN connect for up to 10 users, provide Remote Desktop support for thick client access for up to 10 users.

3.22.5.5 The contractor shall maintain the existing Development and a Test Environment for use in evaluating pre-production releases. The DTE does not need to be accessible outside of the contractor facility.

3.22.5.6 The contractor shall provide help desk support, to include disaster recovery, from 0800 to 1600 EST Monday through Friday, excluding government holidays.

3.22.5.7 The contractor shall support the transition of the entire TacMobile Rational Environment/infrastructure to a government designated facility.\

3.22.6 Future Planning Support

The contractor shall provide expertise to support to the IPT through the process of developing various requirements and architecture products required of an ACAT III POR.

3.22.6.1 The contractor shall provide expertise to support the IPT with those tasks required to ensure integration with future Joint and Family of systems C2 and ISR capabilities through analyses, engineering, documentation development with defined acquisition templates, Course of Action (COA) development tasks; planning for interoperability with other systems/platforms; speed to capability development efforts; and ensuring external system guidance/directives are adhered to by the IPT.

3.22.6.2 The contractor shall develop and maintain Requirements Traceability Matrices (RTM) for TacMobile IPT within the AIR Sub-Portfolio.

3.22.6.3 The contractor shall assist government Test Leads by performing requirements analysis in support of scope definition and reconciling trouble reports and test results against the requirements baseline.

3.22.6.4 The contractor shall support the development of Business Case Analyses to help the IPT determine the cost, benefit and performance impacts of Change Requests for future software and sub-system modifications in the TacMobile Requirements Management process.

.5 The contractor shall provide support for DoDAF v2.02, with the JCIDS (Joint Capabilities Integration & Development System) process, and IBM Rational System Architect in generating products for supporting the TacMobile acquisition milestones. 3.22.6.6 The contractor shall support the IPT's leadership team in performing risk analysis for each of the requirements and shall keep up to date the risk exchange records for these risks.

3.22.7 Software Engineering

The contractor shall provide expertise to support the software engineering activities required to develop the

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changes to the TacMobile C2 and ISR capabilities in support of MPRF, FOS and Joint mission sets.

3.22.7.1 The contractor shall provide expertise to perform software research, design, development, unit test, requirements validation and engineering support required to enable the TacMobile IPT to provide C2 and ISR capabilities in support of future changes to Joint and FoS capabilities.

3.22.7.2 The contractor shall provide expertise to support the initial design documents and AoAs for proposed actions resulting from proposed changes to Joint Community C2 and FoS platforms.

3.22.7.3 The contractor shall provide expertise in system administration of a RHEL environment. The contractor shall have the ability to conduct diagnostic troubleshooting and maintenance of the servers, workstations and network devices.

3.22.7.4 The contractor shall provide senior expertise with software development using Java and C++ on a RHEL OS environment. Experience with Security-Enhanced Linux (SELinux), VMWare, SQL Server and Bash scripting. Extensive knowledge in TCP/IP socket programming, Active Directory/LDAP and encryption libraries. The contractor shall have understanding of Information Assurance compliance, integration and testing.

3.22.7.5 The contractor shall provide expertise in software integration with Windows and RHEL OS environments. Ability to produce IA secure STIG compliant OS environments. Ability to conduct diagnostic troubleshooting and maintenance of the software images for servers and workstations to ensure compatibility with hardware variants. The contractor shall have expertise in patch development for release of IAVA updates or vendor specific patches.

3.22.7.6 The contractor shall provide expertise to support the development of software documentation to such as Interface Control Document (ICD), Interface Design Document (IDD), Software Version Documents (SVD), Software Install Guides, Software Build Plans and applicable licensing information. Documents shall be in accordance with Government approved format. (CDRL T013)

3.22.7.7 The contractor shall provide sub-system verification support at TacMobile related Systems Integration Labs for ISR platforms.

3.22.8 Technician Baseline Integration of Hardware, OS, and Software Solutions

The contractor shall provide computer engineering, systems engineer/administrator, and technician expertise to support the creation, building, fielding, and maintenance of hardware, OS, software baselines, and training for TacMobile sub-systems.

3.22.8.1 The contractor shall support the integration of future developmental sub-system components required to meet functional and information assurance requirements in a Joint system of systems environment.

3.22.8.2 The contractor shall support the TacMobile IPT efforts for HW, SW and Data Library configuration management through the change management process for updated baselines.

3.22.8.3 The contractor shall support documentation development related to sub-system components to enable the TacMobile IPT to successfully build, field, train, and support capabilities for end users. Types of documentation expected to be supported include SOVT, PITCO, user manuals (operator and administration), installation guides, assembly drawings, Installation Requirement Drawings (IRDs) and Installation Design Plans (IDPs). Documents shall be in accordance with Government approved format.

3.22.9 System Information Assurance

The contractor shall provide expertise to support information assurance efforts required by the DoD 8570.01-M. IA support will be required for the full TacMobile life cycle from ISSE support during development of requirements through to IAV response during sustainment. The contractor shall provide support for IA to include

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applicable research, system scans and the modification and development of new accreditation packages for changes to TacMobile C2 and ISR support capabilities.

3.22.9.1 The contractor shall provide security/IA requirements for new capabilities by identifying controls to be put in place for the identified systems and networks. The contractor will recommend, and adopt if necessary, processes for maintaining and enforcing security/IA for identified systems, networks and applications in support of security engineering.

3.22.9.2 The contractor shall provide IA support during the development phase of the TacMobile lifecycle through sub-system vulnerability assessments in the form of technical and non-technical assessments, manual reviews, inspections, and interviews.

3.22.9.3 The contractor shall develop documents that will be a part of the TacMobile IPT C&A efforts including RMF documents as well as updates to the existing DIACAP documents for the variety of existing ATOs and IATOs. Certification and Accreditation (C&A) will follow the Risk Management Framework (RMF) process.

3.22.9.4 The contractor shall manage IAVs during the development phase in accordance with the TacMobile IAVM Plan including support to the FAM and FCB processes for notification of required changes at enclaves.

3.22.9.5 The contractor shall provide support for the verification of new capabilities as well as regression testing to verify that the introduction of new components into the overall system has not caused unwanted changes.

3.22.9.6 The contractor shall provide support for the Information Assurance verification activities leading to a signed TacMobile Test Report or Operational Assessment (OA) or Letter of Observation (LOO).

3.22.10 Procurement Support

3.22.10.1 The contractor shall maintain, track, and update requirements in the BOM; provide projections of procurement lead times; and provide status of ongoing procurements.

3.22.10.2 The contractor shall coordinate technical configuration requirements and hardware vendor inputs with the BOM.

3.22.10.3 The contractor shall coordinate material receipt with the central warehouse to capture and maintain records of OEM serial numbers and N-ERP assigned serial numbers.

3.22.10.4 The contractor shall communicate Government technical configuration requirements to hardware vendors.

3.22.10.5 The contractor shall communicate hardware vendor inputs to Materials Procurement Lead.

3.22.10.6 The contractor shall perform market research and support Government evaluation of hardware vendor proposals based on cost, ability to meet critical delivery schedule, and equipment specifications.

3.22.11 Pre-Installation Engineering Support

3.22.11.1 The Contractor shall support Technical Meetings with NAVAIR, aircraft contractors and RAF personnel. (CDRL T002, T003)

3.22.11.2 The Contractor shall provide software design, development, integration and testing of the MTOC, FAK and SAT. Software development will allow for complete processing of preflight, inflight and post flight data. (CDRL

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T004)

3.22.11.3 The Contractor shall provide updated Source Code and associated Source Code documentation for all software. (CDRL T014)

3.22.11.4 The Contractor shall provide technical support Project Lead during design meetings with NAVAIR, aircraft contractors, and RAF to define hardware and software requirements.

3.22.11.5 The Contractor shall provide technical support for testing.

3.22.11.6 The Contractor shall provide system administrator support.

3.22.11.7 The Contractor shall provide support in the development and execution of software test plan and procedures. (CDRL T015)

3.22.11.8 The Contractor shall develop test report. (CDRL T005)

3.22.11.9 The Contractor shall provide support in the development of System Administration Guide. (CDRL T009)

3.22.11.10 The Contractor shall provide support in the development of System Requirements Specification (SRS) and other Requirements documentation by the Government.

3.22.11.11 The Contractor shall provide support in the development of Software Version Description (SVD) and other software documentation by the Government.

3.22.11.12 The Contractor shall provide technical support at RAF Ground Support labs and sites for hardware integration and testing.

3.22.11.13 The Contractor shall perform Pre-Installation Testing and Check-Out (PITCO) or equivalent for system verification prior to delivery to customer. (CDRL T007)

3.22.11.14 The Contractor shall develop System Operational Verification Test (SOVT) documentation. (CDRL T007)

3.22.11.15 The Contractor shall develop an Installation Design Package (IDP) or equivalent, and as approved by the Project Lead. (CDRL T016)

3.22.11.16 The Contractor shall develop, update and deliver software build/load plans during development and upon system completion.

3.22.11.17 The Contractor shall identify and deliver a list all consumables and critical spares to support the RAF, MTOC and FAK to the Sub-IPT Lead/Project Team Lead.

3.22.11.18 The Contractor shall provide Engineering Change Proposal (ECP) Analysis and ECPs. (CDRL T010)

3.22.11.19 The Contractor shall develop Engineering Drawings. (CDRL T016)

3.22.11.20 The Contractor shall respond to discrepancies, and develop/deliver Program Trouble Reports during all component and developmental testing phases. (CDRL T011)

3.22.12 Installation Engineering Support

3.22.12.1 The Contractor shall support Technical Meetings. (CDRL T003)

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3.22.12.2 The Contractor shall perform system operation verification at site prior to installation.

3.22.12.3 The Contractor shall support hardware/software integration, test, installation, overall system verification and training for the RAF MTOC, FAK and SAT. (CDRL T005)

3.22.12.4 The contractor shall perform The contractor shall perform travel associated with system support, integration, test installation and training for MTOC, FAK and SAT. (CDRL T002)

3.22.12.5 The Contractor shall provide technical system support Project Lead during installation of the MTOC, FAK and SAT.

3.22.12.6 The Contractor shall report discrepancies into ISS as identified during installation. (CDRL T011)

3.22.12.7 The Contractor shall perform OCONUS Travel associated with system installation. (CDRL T002)

3.22.13 Post Installation Engineering Support

The Contractor shall provide engineering support for resolution of SOVT discrepancies found during installation. Refer to ISS section for procedures with responding to discrepancies.

3.22.12.1 The Contractor shall provide Software Maintenance Capability for RAF through software maintenance technical support.

3.22.12.2 The contractor shall provide software maintenance and updates for aircraft interface software to support documented changes to the MPRA (P-8).

3.22.12.3 The contractor shall access the ISS maintenance ticket and tracking site for responding to, and correcting engineering discrepancies.

3.22.12.4 The contractor shall repair or provide replacement of broken items/software deficiencies.

3.22.12.5 The contractor shall provide. The contractor shall provide technical assistance via phone and/or email to resolve hardware and software problems.

3.22.12.6 The contractor shall provide technical assistance via software patches to resolve software discrepancies.

3.22.12.7 The contractor shall provide training assistance via phone and/or email to resolve training shortfalls.

3.22.12.8 The contractor shall provide Corrective maintenance services as soon as possible after request from the Project Lead or the RAF has been received.

3.22.12.9 The contractor shall provide red-lined updates to existing Program of Record (PoR) RAF drawing packages to include the MTOC, FAK and SAT System Upgrades and deliver the updated baseline drawing package to Project Lead after installations.

3.23 EQUIPMENT AND MATERIAL PROCUREMENT
N/A

4.0 INFORMATION TECHNOLOGY (IT) SERVICES REQUIREMENTS

The contractor shall provide Information Technology support in accordance with the basic contract requirements.

4.1 ACQUISITION OF COMMERCIAL SOFTWARE PRODUCTS AND HARDWARE

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In accordance with the basic contract, the contractor shall purchase commercial software products, hardware, and/or provide related services supporting Navy programs and projects from approved sources in accordance with the latest DoN and DoD policies.

4.2 CYBERSECURITY SUPPORT

4.2.1 Cybersecurity Workforce (CSWF) Designation

CSWF contractor personnel shall perform cybersecurity functions. In accordance with DoD 8570.01-M Information Assurance Workforce Improvement Program Manual, the CSWF is comprised of the following categories: IA Technical (IAT) and IA Management (IAM)); and specialties: Computer Network Defense Service Providers (CND-SPs) and IA System Architects and Engineers (IASAEs). Based on the IA function provided by the individual, an IA designator is assigned that references an IA category or specialty. The following Labor Categories shall meet the IA Designator, IA Level/Position, and have the estimated Primary/Additional/Embedded hours performing IA duties: (CDRL T012)

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Labor Category	Quantity Personnel	(b)(4)	
Cybersecurity Contractor Team Lead	(b)(4)		
Cybersecurity Requirements Lead			
Cybersecurity Software Development Lead			
Cybersecurity Test Lead			
Cybersecurity Certification and Accreditation Processes Lead			
Cybersecurity Software Development Support			
Cybersecurity Tester			
Cybersecurity Tester			
Cybersecurity Tester			
Cybersecurity Operations and Maintenance Support			
Cybersecurity Certification and Accreditation Processes Support			

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5.0 TASK ORDER ADMINISTRATION

Administration of the work being performed is required; it provides the Government a means for task order management and monitoring. Regardless of the level of support, the ultimate objective of the contractor is ensuring the Government's requirements are met, delivered on schedule, and performed within budget.

5.1 CONTRACTING OFFICER REPRESENTATIVE (COR) DESIGNATION

The COR for this task order is identified in task order clause 5252.201-9201.

5.2 BASIC CONTRACT REQUIREMENT

In accordance with the basic contract PWS and the requirements of this task order PWS, the contractor shall develop and submit documentation (see CDRL under Para 6.1.1) for task order administration. (CDRL A003, A005, A008, A009, T001, T004, T012)

6.0 DOCUMENTATION AND DELIVERABLES

6.1 CONTRACT DATA REQUIREMENTS LIST (CDRLs)

6.1.1 Administrative CDRL

The following table lists all required administrative data deliverables, CDRLs, applicable to this task:

CDRL #	Deliverable Title	PWS Reference Para	Frequency	Date Due	Security Classification (up to S/TS or unclassified)
A003	Task Order Status Report	3.1.2, 3.3.2, 3.5.2, 3.7.2, 3.9.2, 3.11.2, 3.13.2, 3.15.2, 3.17.2, 3.19.2, 3.21.2, 5.2. 8.1.2, 8.3, 10.0	MTHLY	30 Days after TO award (DATO) and monthly on the 10th	Up to TS/ SCI Access
A005	Task Order Closeout Report	5.2	1TIME	NLT 15 days before completion date	Up to TS/ SCI Access
A008	Cost and Milestones Schedule Plan	5.2	One time with revisions (ONE/R)	NLT 10 DATO; revision NLT 7 days after receipt of Gov't review	Up to TS/ SCI Access
A009	Contractor CPARS Draft Approval Document (CDAD)	5.2	MTHLY	30 DATO and monthly on the 10 th	Up to TS/ SCI Access

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CDRL #	Deliverable Title	PWS Reference Para	Frequency	Date Due	Security Classification (up to S/TS or unclassified)
	Report				
T001	Invoice Support Documentation	5.2	ASREQ	Within 24 hrs from request	Up to TS/SCI Access
T002	Trip / Technical Report	3.1.2, 3.3.2, 3.4.6.1, 3.4.7.4, 3.4.7.7, 3.5.2, 3.6.6.1, 3.6.7.4, 3.6.7.7, 3.7.2, 3.8.5.1, 3.8.6.4, 3.8.6.7, 3.9.2, 3.11.2, 3.12.8.1, 3.12.9.4, 3.12.9.7, 3.13.2, 3.14.10.1, 3.14.11.4, 3.14.11.7, 3.15.2, 3.16.12.4, 3.16.12.7, 3.17.2, 3.18.10.1, 3.18.11.4, 3.18.11.7, 3.19.2, 3.20.10.4, 3.20.11.1, 3.20.11.4, 3.20.11.7, 3.21.2, 3.22.11.1, 3.22.12.4, 3.22.12.7, 11.1	ASREQ	10 Days post trip	Up to TS/SCI Access
T003	Conference, Meeting Minutes & Presentations Reports	3.1.2, 3.3.2, 3.4.6.1, 3.4.7.1, 3.5.2, 3.6.6.1, 3.6.7.1, 3.7.2, 3.8.5.1, 3.8.6.1, 3.9.2, 3.11.2, 3.12.8.1, 3.12.9.1, 3.13.2, 3.14.10.1, 3.14.11.1, 3.15.2, 3.16.11.1, 3.16.12.1, 3.17.2, 3.18.10.1, 3.18.11.1, 3.19.2, 3.20.10.1, 3.20.11.1, 3.21.2, 3.22.11.1, 3.22.12.1	ASREQ	10th of Each Month	Up to TS/SCI Access
T004	Limitation Notification & Rationale	5.2	ASREQ	Within 24 hrs from occurrence	Up to TS/SCI Access

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6.1.2 Technical CDRL

The following table lists all required technical data deliverables, (CDRLs), applicable to this task order:

CDRL #	Deliverable Title	PWS Reference Para	Frequency	Date Due	Security Classification (up to S/TS or unclassified)
A001	Software Development Plan (SDP)	3.4.6.2, 3.6.6.2, 3.8.5.2, 3.12.8.2, 3.14.10.2, 3.16.11.2, 3.18.10.2, 3.20.10.2, 3.22.11.2	One time with revisions (ONE/R)	30 DATO; revision NLT 7 days after receipt of government review	Up to TS/SCI Access
T005	Acceptance Test Report / Test Report General/Software Test Report	3.4.6.8, 3.4.7.3, 3.6.6.8, 3.6.7.3, 3.8.5.8, 3.8.6.3, 3.12.8.8, 3.12.9.3, 3.14.10.8, 3.14.11.3, 3.16.11.8, 3.16.12.3, 3.18.10.8, 3.18.11.3, 3.20.10.8, 3.20.11.3, 3.22.11.8, 3.22.12.3	ASREQ	10 th of Each Month	Up to TS/SCI Access
T006	Plans, Management/ Performance/Development	3.1.2, 3.3.2, 3.5.2, 3.7.2, 3.9.2, 3.11.2, 3.13.2, 3.15.2, 3.17.2, 3.19.2, 3.21.2	ASREQ	10 th of Each Month	Up to TS/SCI Access
T007	Plans, Installation/Engineering /Checkout	3.4.6.13, 3.4.6.14, 3.6.6.13, 3.6.6.14, 3.8.5.13, 3.8.5.14, 3.12.8.13, 3.12.8.14, 3.14.10.13, 3.14.10.14,	ASREQ	10 th of Each Month	Up to TS/SCI Access

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CDRL #	Deliverable Title	PWS Reference Para	Frequency	Date Due	Security Classification (up to S/TS or unclassified)
		3.16.11.13, 3.16.11.14, 3.18.10.13, 3.18.10.14, 3.20.10.13, 3.20.10.14, 3.22.11.13, 3.22.11.14			
T008	Program Management Report, General	3.1, 3.3, 3.5, 3.7, 3.9, 3.11, 3.13, 3.15, 3.17, 3.19, 3.21	ASREQ	10 th of Each Month	Up to TS/ SCI Access
T009	Operator Manual/Maintenance Manual and/or User Technical Manual	3.4.6.9, 3.6.6.9, 3.8.5.9, 3.12.8.9, 3.14.10.9, 3.16.11.9, 3.18.10.9, 3.20.10.9, 3.22.11.9	ASREQ	Prelim – 90 days prior to system delivery, final-IDT 30 days after approval	Up to TS/ SCI Access
T010	Engineering Change Proposal (ECP) Analysis	3.4.6.18, 3.6.6.18, 3.8.5.18, 3.12.8.18, 3.14.10.18, 3.16.11.18 3.18.10.18, 3.20.10.18, 3.22.11.18	ASREQ	10 th of Each Month	Up to TS/ SCI Access
T011	Program Trouble Reports(PTRs)	3.4.6.20, 3.4.7.6, 3.6.6.20, 3.6.7.6, 3.8.5.20, 3.8.6.6, 3.12.8.20, 3.12.9.6, 3.14.10.20, 3.14.11.6, 3.16.11.20,	ASREQ	10 th of Each Month	Up to TS/ SCI Access

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CDRL #	Deliverable Title	PWS Reference Para	Frequency	Date Due	Security Classification (up to S/TS or unclassified)
		3.16.12.6, 3.18.10.20, 3.18.11.6, 3.20.10.20, 3.20.11.6, 3.22.11.20, 3.22.12.6			
T012	Cyber Security Workforce (CSWF) Report	4.2.1, 5.2, 8.1.2, 8.3	MTHLY	10th of Each Month	Up to TS/SCI Access
T013	Software Build Plan	3.2.2.6, 3.2.4.11, 3.10.2.5, 3.10.4.11, 3.12.3.3, 3.14.7.1.3, 3.16.7.6, 3.18.7.6, 3.20.7.6, 3.22.7.6	ASREQ	10 th of Each Month	Up to TS/SCI Access
T014	Source Code	3.4.6.3, 3.6.6.3, 3.8.5.3, 3.12.8.3, 3.14.10.3, 3.16.11.3, 3.18.10.3, 3.20.10.3, 3.22.11.3	ONE/R	14 days before completion of task order; revision NLT 7 days after receipt of government review	Up to TS/SCI Access
T015	Test Plan/Test and Evaluation Master Plan (TEMP)/Test Procedures and Specifications Acceptance Test Plan/Security Test Plan and Evaluation	3.4.6.7, 3.6.6.7, 3.8.5.7, 3.12.8.7, 3.14.10.7, 3.18.10.7, 3.20.10.7, 3.22.11.7	ASREQ	15 working days after Government approval	Up to TS/SCI Access

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CDRL #	Deliverable Title	PWS Reference Para	Frequency	Date Due	Security Classification (up to S/TS or unclassified)
T016	Installation Design Package/As-Built Drawings, General	3.4.6.15, 3.4.6.19, 3.6.6.15, 3.6.6.19, 3.8.5.15, 3.8.5.19, 3.12.8.15, 3.12.8.19, 3.14.10.15, 3.14.10.19, 3.16.11.15, 3.16.11.19, 3.18.10.15, 3.18.10.19, 3.20.10.15, 3.20.10.19, 3.22.11.15, 3.22.11.19	ASREQ	10 th of Each Month	Up to TS/SCI Access
T017	Training Course / Curriculum Outline	3.4.1.1, 3.6.1.1, 3.14.1.1, 3.16.1.1, 3.18.1.1, 3.20.1.1, 3.22.1.1	ASREQ	Draft Final- 2 weeks before 1 st in-progress review, Final – 2 weeks before IPR, Change Pages – 30 days after receipt of government approval	Up to TS/SCI Access

7.0 QUALITY

The contractor shall provide quality support in accordance with the basic contract requirements.

8.0 SECURITY

8.1 ORGANIZATION

8.1.1 Security Classification

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As specified in the DoD Contract Security Classification Specification, DD Form 254, the contractor shall perform classified work under this task order. Prior to commencement of classified work, all personnel shall have a SECRET personnel clearance (PCL) and some personnel shall have TOP SECRET with Sensitive Compartment Information (SCI) access facility clearance (FCL).

8.1.1.1 U.S. Government security clearance eligibility is required to access and handle classified and certain controlled unclassified information (CUI), attend program meetings, and work within restricted areas unescorted. Access to SCI is limited to U.S. Government Facilities or other U.S. Government sponsored SCI Facilities (SCIFs) authorized on the DD254. The contractor shall not generate any SCI deliverables.

8.1.1.2 This task order allows for various levels of security to support specific PWS tasks. The following table outlines the minimum required security clearance per task. The contractor shall provide personnel meeting the specific minimum personnel clearance (PCL) to support the PWS tasks listed below:

Required Security Clearance	PWS Task Paragraph
Secret	3.2, 3.4, 3.6, 3.8, 3.10, 3.12, 3.14, 3.16, 3.18, 3.20, 3.22
Top Secret/SCI access	3.1- 3.22

8.1.2 Security Officer

The contractor shall appoint a Facility Security Officer (FSO) to support those contractor personnel requiring clearance and/or access to Government facility/installation and/or access to information technology systems under this task order. The FSO is typically key management personnel who is the contractor's main POC for security issues. The FSO shall have a U.S. Government security clearance equal to or higher than the FCL required on this/task order. The FSO shall be responsible for tracking the security requirements for all personnel (subcontractors included) utilized on task order. Responsibilities include tracking all personnel assigned Government badges and entering/maintaining personnel security mandatory training information within the Staffing Plan document, which is an attachment to the task order status report (TOSR) (CDRL A003), and if applicable, updating and tracking data in the CSWF Report (CDRL T012).

8.2 PERSONNEL

Prior to any labor hours being charged on task order, the contractor shall ensure their personnel (including administrative and subcontractor personnel) have obtained and can maintain favorable background investigations at the appropriate level(s) for access level required by this task order, and if applicable, are certified/ credentialed for the CSWF. Investigations are not necessarily required for personnel performing unclassified work who do not require access to Government installations/facilities and/or Government IT systems/IT resources.

Prior to task order support, all personnel shall possess a SECRET personnel clearance (PCL) and some personnel shall possess TOP SECRET- SENSITIVE COMPARTMENTED INFORMATION access (PCL).

8.3 MANDATORY TRAINING

Specific contractor personnel (including subcontractors) shall complete mandatory training based on the access required and work site location. The contractor shall report individual personnel training status in the monthly task order status report (TOSR) Staffing Plan, Training tab (CDRL A003) Attachment 1 of Exhibit A), and for Cybersecurity Workforce (CSWF) contractor personnel, the contractor shall identify all mandatory cybersecurity training and certifications in the CSWF Report (CDRL T012)

9.0 GOVERNMENT FURNISHED INFORMATION (GFI)

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Government Furnished Information (GFI) is Government owned intellectual property provided to contractors for performance on a task order. For the purposes of this task order, GFI includes manuals, technical specifications, maps, building designs, schedules, drawings, test data, etc. Depending on information contained in a document, the contractor shall comply with additional controls (e.g., completion of a Non-Disclosure Agreements, etc.) for access and distribution.

GFI is utilized on this task order. Any applicable document (PWS Para 16.0) not available online, the Government will provide document as GFI listed in the table below. The contractor shall inventory all GFI by tracking distribution and location and provide a GFI inventory to the Government. The contractor shall use the GFI provided to support this task order only – use of GFI document(s) to support other projects beyond this task order is not allowed. Unless otherwise specified, all GFI will be provided by the Government by the estimated delivery date listed in the table below, and the contractor shall return all GFI to the Government at completion of the task order. If a contractor requires additional GFI other than what is listed, the contractor shall submit a request to the COR within 30 days after task order award.

Item #	Description	GFI Estimated Delivery Date
001	Engineering drawings	7 days after TO award
002	MS Word or PDF copies of technical documentation required for IV&V.	7 days after TO award

10.0 GOVERNMENT PROPERTY

As defined in FAR Part 45, Government property is property owned or leased by the Government which includes Government-furnished (GFP) and Contractor-acquired property (CAP). Government property is material, equipment, special tooling, special test equipment, and real property.

NOTE: NMCI computers will be assigned to a contractor. Prior to a NMCI computer being removed from a Government facility, the contractor employee shall possess at all times a Property Pass (OF-7) with each NMCI asset that will be authorized and signed by the COR or other authorized Government personnel. Although NMCI assets are not tracked as GFP, the contractor shall separately track and report all NMCI assets assigned to all contractor employees for use on this task order. For reporting purposes, the contractor shall include a list of NMCI assets assigned to this task order (separate from the GFP inventory list) in the TOSR (CDRL A003).

10.1 GOVERNMENT-FURNISHED PROPERTY (GFP)

As defined in FAR Part 45, GFP is property in the possession of, or directly acquired by, the Government and subsequently furnished to the contractor for performance of a contract. GFP includes spares and property furnished for repair, maintenance, overhaul, or modification. GFP includes Government-furnished equipment (GFE), Government-furnished material (GFM), Special Tooling (ST) and Special Test Equipment (STE).

GFP will not be provided on this task order.

10.2 CONTRACTOR-ACQUIRED PROPERTY (CAP)

As defined in FAR Part 45, CAP is property acquired, fabricated, or otherwise provided by the contractor for performing a contract and to which the Government has title but has not yet performed receipt and acceptance. CAP consists of Contractor-acquired equipment (CAE), Contractor-acquired material (CAM), ST, and STE.

Pursuant to SPAWARINST 4440.12A, the contractor shall provide CAP identified in the table below. CAP items are acquired, fabricated, or otherwise provided by the contractor to support the task order and may be wholly provided to Space and Naval Warfare Systems Center Atlantic, incorporated into a system, consumed, or delivered as an end item in the performance of the task order. Prior to actual items being acquired, fabricated, or otherwise

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provided, the contractor shall obtain COR concurrence.

CLIN 4102/5102- PMW 750 OPN

Item #	Description, CAP	Unit/Issue	Quantity
1	Binders 1/2"	EACH	250
2	Binders 1"	EACH	50
3	Binders 1 1/2"	EACH	15
4	8.5x11 28lb paper (half case)	EACH	15
5	11x17 28lb paper (ream)	EACH	30
6	DVD+R Printable (50/pack)	PACK	2
7	Dividers 11x17	EACH	15
8	DVD+RW (30/pack)	PACK	18
9	CD labels (250/pack)	PACK	1
10	11x17 Pressboard Folders	EACH	285
11	Pencils (12/pack)	PACK	2
12	Pens (4/pack)	PACK	36
13	Highlighters	PACK	5
14	Post-It Flags	PACK	12
15	Erasers (3/pack)	PACK	5
16	Divider Labels - 11x17 (240 per pack)	PACK	4
17	6in Digital Caliper	EACH	2
18	Clear Front Report Covers (25/pack)	PACK	16
19	11x17 .5" Binder	EACH	50
20	11x17 1" Binder	EACH	200
21	11x17 1.5" Binder	EACH	50

10.3 TRANSPORTATION OF EQUIPMENT/MATERIAL

No transportation of equipment/material is required by the contractor on this task order

11.0 TRAVEL

11.1 LOCATIONS

The contractor shall be prepared to travel to the following locations. Prior to any travel taken in support of this task order, the contractor shall obtain COR concurrence. Travel to foreign countries outside of the continental United States (OCONUS) is required. The applicable countries include the following in Attachment #2. Prior to travel, the contractor shall meet all necessary travel requirements for their company and personnel to support work in the noted foreign OCONUS sites. (CDRL T002)

CLIN 4001/5001: PMW 750 RDT&E

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# Trips	# People	# Days	# Nights	From (Location)	To (Location)
3	1	5	4	Charleston, SC	Patuxent River, MD
1	1	5	4	Charleston, SC	Jacksonville, FL
1	1	5	4	Charleston, SC	San Diego, CA
1	1	10	10	Charleston, SC	Kadena, Japan
1	1	10	10	Charleston, SC	Whidbey Island, WA
1	1	10	10	Charleston, SC	Sigonella, Italy
3	1	5	4	Patuxent River, MD	Charleston, SC
1	1	5	4	Patuxent River, MD	Jacksonville, FL
1	1	5	4	Patuxent River, MD	San Diego, CA
1	1	10	10	Patuxent River, MD	Kadena, Japan
1	1	10	10	Patuxent River, MD	Whidbey Island, WA
1	1	10	10	Patuxent River, MD	Sigonella, Italy

CLIN 4101/5101: PMW 750 OMN

# Trips	# People	#Days	#Nights	From (Location)	To (Location)
3	1	5	4	Charleston, SC	Patuxent River, MD
3	1	5	4	Charleston, SC	Jacksonville, FL
1	1	5	4	Charleston, SC	San Diego, CA
3	1	10	10	Charleston, SC	Kadena, Japan
3	1	10	10	Charleston, SC	Whidbey Island, WA
1	1	10	10	Charleston, SC	Sigonella, Italy
2	1	5	10	Patuxent River, MD	Charleston, SC
3	1	5	10	Patuxent River, MD	Jacksonville, FL
1	1	5	10	Patuxent River, MD	San Diego, CA

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3	1	10	10	Patuxent River, MD	Kadena, Japan
3	1	10	10	Patuxent River, MD	Whidbey Island, WA
1	1	10	10	Patuxent River, MD	Sigonella, Italy

CLIN 4102/5102: PMW 750 OPN

# Trips	# People	# Days	# Nights	From (Location)	To (Location)
3	1	5	4	Charleston, SC	Patuxent River, MD
2	1	28	27	Charleston, SC	Jacksonville, FL
1	1	30	30	Charleston, SC	Manama, Bahrain
1	1	30	30	Charleston, SC	Kadena, Japan
1	1	28	28	Charleston, SC	Whidbey Island, WA
1	1	30	30	Charleston, SC	K-Bay, Hawaii
1	1	15	15	Charleston, SC	Dallas, TX
3	1	5	4	Patuxent River, MD	Charleston, SC
2	3	28	28	Patuxent River, MD	Jacksonville, FL
1	2	30	30	Patuxent River, MD	Manama, Bahrain
1	2	30	30	Patuxent River, MD	Kadena, Japan
1	2	28	28	Patuxent River, MD	Whidbey Island, WA
1	2	30	30	Patuxent River, MD	K-Bay, Hawaii
1	1	21	20	Patuxent River, MD	Dallas, TX

CLIN 4103/5103: PMA 290 APN

# Trips	# People	# Days	# Nights	From (Location)	To (Location)
1	1	5	4	Patuxent River, MD	Charleston, SC
1	1	5	4	Charleston, SC	Patuxent River, MD

CLIN 4104/5104: PMA 290 RDT&E

# Trips	# People	# Days	# Nights	From (Location)	To (Location)
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3	1	5	4	Charleston, SC	Patuxent River, MD
1	1	5	4	Charleston, SC	Jacksonville, FL
1	1	5	4	Charleston, SC	San Diego, CA
1	1	10	10	Charleston, SC	Kadena, Japan
1	1	10	10	Charleston, SC	Whidbey Island, WA
1	1	10	10	Charleston, SC	Sigonella, Italy
3	1	5	4	Patuxent River, MD	Charleston, SC
1	1	5	4	Patuxent River, MD	Jacksonville, FL
1	1	5	4	Patuxent River, MD	San Diego, CA
1	1	10	10	Patuxent River, MD	Kadena, Japan
1	1	10	10	Patuxent River, MD	Whidbey Island, WA
1	1	10	10	Patuxent River, MD	Sigonella, Italy

CLIN 4105/5105: AUSTRALIA

# Trips	# People	#Days	#Nights	From (Location)	To (Location)
3	1	5	4	Charleston, SC	Patuxent River, MD
1	1	5	4	Charleston, SC	Jacksonville, FL
1	1	5	4	Charleston, SC	San Diego, CA
1	1	10	10	Charleston, SC	Kadena, Japan
1	1	10	10	Charleston, SC	Whidbey Island, WA
1	1	10	10	Charleston, SC	Sigonella, Italy
1	1	17	17	Charleston, SC	Darwin, Australia
1	1	25	25	Patuxent River, MD	Darwin, Australia
3	1	5	4	Patuxent River, MD	Charleston, SC
1	1	5	4	Patuxent River, MD	Jacksonville, FL
1	1	5	4	Patuxent River, MD	San Diego, CA
1	1	10	10	Patuxent River, MD	Kadena, Japan
1	1	10	10	Patuxent River, MD	Whidbey Island, WA
1	1	10	10	Patuxent River, MD	Sigonella, Italy

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CLIN 4106/5106: UNITED KINGDOM

# Trips	# People	#Days	#Nights	From (Location)	To (Location)
3	2	4	3	Charleston, SC	Patuxent River, MD
1	1	5	4	Patuxent River, MD	Stennis, MS
1	2	6	5	Patuxent River, MD	Bristol, UK
1	2	6	5	Patuxent River, MD	Lossiemouth, UK
1	2	5	4	Patuxent River, MD	Whidbey Island, WA
2	2	5	4	Patuxent River, MD	Charleston, SC
1	2	6	5	Charleston, SC	Lossiemouth, UK

CLIN 4107/5107: NEW ZEALAND

# Trips	# People	#Days	#Nights	From (Location)	To (Location)
1	2	12	11	Patuxent River, MD	Auckland, NZ

CLIN 4108/5108: NORWAY

# Trips	# People	#Days	#Nights	From (Location)	To (Location)
2	4	18	16	Patuxent River, MD	Oslo, Norway
1	2	6	5	Charleston, SC	Oslo, Norway
2	2	5	4	Patuxent River, MD	Charleston, SC
3	2	4	3	Charleston, SC	Patuxent River, MD
1	1	5	4	Charleston, SC	Stennis, MS
1	1	5	4	Patuxent River, MD	Stennis, MS
1	2	5	4	Patuxent River, MD	Whidbey Island, WA
1	4	5	4	Charleston, SC	Whidbey Island, WA

CLIN 4109/5109: SOUTH KOREA

# Trips	# People	#Days	#Nights	From (Location)	To (Location)
2	5	18	16	Patuxent River, MD	Seoul, SK

CLIN 4110/5110: SAUDI ARABIA

# Trips	# People	#Days	#Nights	From (Location)	To (Location)
2	5	18	16	Charleston, SC	Riyadh, Saudi Arabia

12.0 SAFETY ISSUES

Safety requirements are in accordance with the basic contract PWS.

13.0 SUBCONTRACTING REQUIREMENTS

13.1 APPROVED SUBCONTRACTORS

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Subcontracting requirements are in accordance with the basic contract. If the prime contractor is planning to utilize subcontractor(s) on this task order, the applicable subcontractors shall be specified at task order award. Per FAR clause 52.244-2, if a subcontractor (includes tier 1, tier 2, tier 3, etc.) is proposed by a prime and is not approved on the basic contract, formal justification is required and subject to Government approval.

AT THE TIME OF AWARD ON 22 DEC 2017, (b)(4) IS THE ONLY APPROVED SUB FOR THIS TASK ORDER.

14.0 ACCEPTANCE PLAN

Inspection and acceptance is performed by the COR on all services, data, and non-data deliverables in accordance with the QASP, Attachment #1.

15.0 OTHER CONDITIONS/REQUIREMENTS

15.1 FUNDING ALLOCATION

This task order is funded with multiple appropriations with various Accounting Classification Reference Numbers (ACRNs) which may or may not cross multiple contract performance years. Depending on the services performed and the applicable timeframe, the contractor shall invoice cost in accordance with Section B, Section C, and Section G of the task order award. Unless otherwise advised, the contractor shall itemize all summary of work and financial information in the CSR CDRL by each task order funding CLIN. The ability of the contractor to perform adequate billing and accounting will be reflected in the contractor's annual Government CPAR rating.

16.0 APPLICABLE DOCUMENTS (AND DEFINITIONS)

16.1 REQUIRED DOCUMENTS

The contractor shall utilize all required documents listed within the basic contract as applicable to this task order. In addition, the following required documents are applicable to this task order:

	Document Number	Title
a.	N65236-14-D-4925	Basic Contract
b.	NAVSEA SL720-AA-MAN-010 Rev 93	Fleet Modernization Program
c.	MIL-STD-24784	Technical Document Standards
d.	MIL STD 1388.2B	Technical Document Standards
e.	MIL STD 4300.34	Technical Document Standards
f.	MIL-P-24534A	Planned Maintenance System; Development of Maintenance Requirement Cards, Maintenance Index Pages, and Associated Documentation
g.	E0005-AC-HBK 010, NAVSEA/SPAWAR	NAVSEA/SPAWAR TMMP Operations and Life Cycle Support Procedures
h.	SPAWARINST 4160.3C	SPAWAR Policy, Procedures and Responsibilities for Technical Manual Management Operations and Life Cycle Support
i.	SECNAVINST 5239.3	Department of the Navy Information Assurance Policy

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j.	SPAWARSYSCENCHASINST 5000.1A	Administration of Contractor Employees Working in SPAWARSYSCEN Atlantic, Charleston Facilities
k.	OPNAVINST 5239.1b	Navy Information Assurance Publication 5239-13 Vol. I/II/III Certification & Accreditation Navy Information Assurance Program
l.	DoD Directive TS 3600.1	December 1992 Information Warfare
m.	DoD Directive 5220.22-M	DoD National Industrial Security Program Operating Manual (NISPOM)
n.	DOD Directive 8500.1	Information Assurance
o.	DODINST 5215.2	Computer Security Technical Vulnerability Reporting Program (CSTVRP)
p.	DoD Directive 5200.19	Control of Compromising Emanations
q.	DoDINST 8500.2	Information Assurance (IA) Implementation
r.	DoD 8510.1-M	DIACAP Manual
s.	NIST (SP) 800-53 Revision 4	NIST Special Publication (SP) 800-53 Revision 4, Security and Privacy Controls for Federal Information Systems and Organizations
t.	UK-P-SAN	FMS Letter of Offer and Acceptance (LOA)
u.	NORWAY-P-SAN	FMS Letter of Offer and Acceptance (LOA)
v.	NEW ZEALAND-X-XXX	FMS Letter of Offer and Acceptance (LOA)
w.	SAUDI ARABIA-X-XXX	FMS Letter of Offer and Acceptance (LOA)
x.	SOUTH KOREA-X-XXX	FMS Letter of Offer and Acceptance (LOA)

16.2 GUIDANCE DOCUMENTS

The contractor shall utilize all guidance documents listed within the basic contract as applicable to this task order.

16.3 SOURCE OF DOCUMENTS

The contractor shall obtain all applicable documents necessary for performance on this task order. Many documents are available from online sources. Specifications and commercial/industrial documents may be obtained from the following sources:

Copies of Federal Specifications may be obtained from General Services Administration Offices in Washington, DC, Seattle, San Francisco, Denver, Kansas City, MO., Chicago, Atlanta, New York, Boston, Dallas and Los Angeles.

Copies of military specifications may be obtained from the Commanding Officer, Naval Supply Depot, 3801 Tabor Avenue, Philadelphia, PA 19120-5099. Application for copies of other Military Documents should be addressed to Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Ave., Philadelphia, PA 19120-5099.

All other commercial and industrial documents can be obtained through the respective organization's website.

16.4 ACRONYMS

Acronym	Definition
AI	Action Item
AoA	Analysis of Alternatives

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ATOs	Authority To Operate
C2	Command and Control
C&A	Certification and Accreditation
CAE	Contractor Acquired Equipment
CAM	Contractor Acquired Material
CAP	Contractor Acquired Property
CI	Configuration Item
COA	Course of Action
COTS	Commercial-Off-The-Shelf
CUP	Capability Upgrade Program
DIACAP	Department of Defense Information Assurance Certification and Accreditation Process
ECP	Engineering Change Proposal
FOS	Family of Systems
FAM	Fleet Assisted Maintenance
FCA	Functional Configuration Audits
FCB	Field Change Bulletin
FIT	Fleet Introductory Training
FMS	Foreign Military Sales
GFE	Government Furnished Equipment
GFI	Government Furnished Information
GFM	Government Furnished Material
GOTS	Government Off The Shelf
HW	Hardware
IATOs	Interim Authority to Operate
ICD	Interface Control Document
ICR	In-Country Reprogramming
IDD	Interface Design Document
IDPs	Installation Design Plans
IEEE & EIA	Industry Electrical, Electronics Engineer (IEE) & the Electronic Industry Alliance (EIA)
IMS	Integrated Master Schedule
IOC	Initial Operational Capability
IPT	Integrated Product Team
IRDs	Installation Requirement Drawings
ISR	Intelligence, Surveillance, and Reconnaissance
ISS	International Site Support
IT	Information Technology
IVAM	Information Assurance Vulnerability Management
JCIDS	Joint Capabilities Integration & Development System
LDAP	Lightweight Directory Access Protocol
LCCB	Local Configuration Control Board
LOA	Letter of Offer and Acceptance
LOO	Letter of Observation

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TOC / MTOC	Tactical Operations Center/Mobile Tactical Operations Center
MPRA	Maritime Patrol and Reconnaissance Aircraft
MPRF	Maritime Patrol and Reconnaissance Forces
MSI	Master Site Inventory
O&M	Operations and Maintenance
OEM	Original Equipment Manufacturer
OJT	On-the-job Training
PCA	Physical Configuration Audits
PITCO	Pre-Installation Testing and Check-Out
PM	Program Manager
PoR	Program of Record
PWS	Performance Work Statement
QASP	Quality Assurance Surveillance Plan
RAF	Royal Air Force
RMF	Risk Management Framework
ROKN	Republic of South Korean Navy
RNoAF	Royal Norwegian Air Force
RNZAF	Royal New Zealand Air Force
RSNF	Royal Saudi Naval Forces
RTM	Requirements Traceability Matrices
SME	Subject Matter Expert
SOVT	System Operational Verification and Test
SPAWARSSYSCEN	Space and Naval Warfare Systems Center
SQL	Structured Query Language
SRS	System Requirements Specification
STIG	Security Technical Implementation Guide
SVD	Software Version Description
SW	Software
TACMASS	Tactical Mission Acoustic Support System
TCP/IP	Transmission Control Protocol/Internet Protocol
TO	Task Order
USG	United States Government

LIST OF EXHIBITS & ATTACHMENTS

Exhibit A -- CDRLs - DD FORM 1423

Attachment #1 – Quality Assurance Surveillance Plan (QASP)

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SECTION E INSPECTION AND ACCEPTANCE

SECTION E INSPECTION AND ACCEPTANCE

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
4001/5001	Destination	Government	Destination	Government
4101/5101	Destination	Government	Destination	Government
4102/5102	Destination	Government	Destination	Government
4103/5103	Destination	Government	Destination	Government
4104/5104	Destination	Government	Destination	Government
4105/5105	Destination	Government	Destination	Government
4106/5106	Destination	Government	Destination	Government
4107/5107	Destination	Government	Destination	Government
4108/5108	Destination	Government	Destination	Government
4109/5109	Destination	Government	Destination	Government
4110/5110	Destination	Government	Destination	Government

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SECTION F DELIVERABLES OR PERFORMANCE

The periods of performance for the following Items are as follows:

4001	12/22/2017 - 10/21/2018
4101	12/22/2017 - 10/21/2018
4102	12/22/2017 - 10/21/2018
4103	12/22/2017 - 10/21/2018
4104	12/22/2017 - 10/21/2018
4105	12/22/2017 - 10/21/2018
4106	12/22/2017 - 10/21/2018
4107	12/22/2017 - 10/21/2018
4108	12/22/2017 - 10/21/2018
4109	12/22/2017 - 10/21/2018
4110	12/22/2017 - 10/21/2018

CLIN - DELIVERIES OR PERFORMANCE

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SECTION G CONTRACT ADMINISTRATION DATA

(b)(6), 5.2.1.H.0
 SPAWAR Systems Center Atlantic PO box 190022
 N. Charleston, SC 29419
 (b)(6)@navy.mil
 843-218-(b)(6)

SECTION G CONTRACT ADMINISTRATION DATA

CRM TRACKING# CRM-17-01911

The SPAWAR Atlantic Ombudsman is Steve Harnig, (843) 218-4560

252.204-0012 OTHER (SEP 2009)

CLINs have multiple funding from multiple customers. Payment cannot be made using any of the current clauses due to one customer's funds would be paying for another customer's work. Use PGI 204.7108 (d) 012 other and pay from the ACRNs cited on the invoice.

Government advises contractor on ACRNs to invoice.

5252.232-9208 INVOICING INSTRUCTIONS FOR SERVICES USING WIDE AREA WORK FLOW (WAWF) (APR 2009) (SPAWAR)

(a) Invoices for services rendered under this contract shall be submitted electronically through the Wide Area Work Flow-Receipt and Acceptance (WAWF). The contractor shall submit invoices for payment per contract terms. The Government shall process invoices for payment per contract terms.

(b) The vendor shall have their Cage Code activated by calling 1-866-618-5988 and selecting option 2. Once activated, the vendor shall self-register at the WAWF website at <https://wawf.eb.mil> Vendor training is available on the internet at <https://wawftraining.eb.mil>. WAWF Vendor "Quick Reference" Guides are located at the following web site:

http://acquisition.navy.mil/rda/home/acquisition_one_source/ebusiness/don_ebusiness_solutions/wawf_overview/vendor_information

(c) Cost back-up documentation (such as delivery receipts, labor hours & material/travel costs etc.) shall be included and attached to the invoice in WAWF. Attachments created with any Microsoft Office product or Adobe (.pdf files) is attachable to the invoice in WAWF. The total size limit for files per invoice is 5 megabytes. A separate copy shall be sent to the COR.

(d) Contractors approved by DCAA for direct billing will not process vouchers through DCAA, but may submit directly to DFAS. Vendors MUST still provide a copy of the invoice and any applicable cost back-up documentation supporting payment to the Acceptor/Contracting Officer's Representative (COR) if applicable. Additionally, a copy of the invoice(s) and attachment(s) at time of submission in WAWF shall also be provided to each point of contact identified in section (G) of this clause by email. If the invoice and/or receiving report are delivered in the email as an attachment it must be provided as a .PDF, Microsoft Office product or other mutually agreed upon form between the Contracting Officer and vendor.

(e) A separate invoice will be prepared no more frequently than for every two weeks. Do not

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combine the payment claims for services provided under this contract.

(f) The following information is provided for completion and routing of the invoice in WAWF:

	Cost Type Orders	Fixed Price Orders
WAWF Invoice Type	Cost Voucher	2-N-1 (Services Only)
Issuing Office DODAAC	N65236	N65236
Admin DODAAC:	S3915A	S3915A
Inspector DODAAC (if applicable)	N65236	N65236
Acceptor DODAAC:	N65236	N65236
LPO DODAAC:	N65236	N65236
DCAA Auditor DODAAC:	HAA310	HAA310
Service Approver DODAAC	N65236	N65236
Pat DODAAC	HQ0337	HQ0337

(g) After submitting the document(s) to WAWF, click on "Send More Email Notifications" and add the acceptor/receiver email addresses noted below in the email address blocks. The contractor shall, at a minimum, include the COR, Receiver, and Acceptor. This additional notification to the government is necessary to ensure that the acceptor/receiver is aware that the invoice documents have been submitted into WAWF:

Send Additional Email Notification(s) to:

(b)(6), 843-218-(b)(6), (b)(6)@navy.mil

LIMITATION OF LIABILITY – INCREMENTAL FUNDING (89 JUL)

This delivery order is incrementally funded and the amount currently available for payment hereunder is limited to \$847,131.00. It is estimated that these funds will cover the cost of performance through 21 OCTOBER 2018. Subject to the provision of the clause entitled "Limitation of Funds" (FAR 52.232-22) of the general provisions of this contract, no legal liability on the part of the Government for payment in excess of \$847,131.00 shall arise unless additional funds are made available and are incorporated as a modification to the delivery order.

CLIN	Total CPFF Ceiling	Previously Funded Obligation	Funded This Action	BALANCE UNFUNDED
4001	(b)(4)			
4101				
4102				
4103				
4104				
4105				
4106				
4107				
4108				
4109				
4110				
5001				
5101				

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5102	(b)(4)
5103	
5104	
5105	
5106	
5107	
5108	
5109	
5110	

Accounting Data

SLINID	PR Number	Amount
410301	1300685185	(b)(4)
LLA :		
AC 1781810 M2T4 251 00039 0 050120 2D 000000 A30004305958		
ACRN:AC		
COST CODE:A30004305958		
NWA/BS#:BS-001719.0301010101		
410601	1300685185	(b)(4)
LLA :		
AA 1781804 5RZ3 251 00039 0 050120 2D 000000 A00004305958		
Standard Number: N001918WX02850		
ACRN:AA		
COST CODE:A00004305958		
DOC#:N001918WX02850		
NWA/BS#:100001339631-0010		
410602	1300685185	(b)(4)
LLA :		
AB 1781804 5RZ3 251 00039 0 050120 2D 000000 A10004305958		
Standard Number: N001918WX02850		
ACRN:AB		
COST CODE:A10004305958		
DOC#:N001918WX02850		

BASE Funding (b)(4)

Cumulative Funding (b)(4)

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SECTION J LIST OF ATTACHMENTS

QASP

CDRLS Portfolio